

# Aviation News

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NOV. 19, 1945



**Clinic Co-chairman:** Presiding over the sessions of the National Aviation Clinic at Oklahoma City this week will be William R. Enyart, president of the National Aeronautic Association, joint sponsor of the Clinic, who will be co-chairman with Gov. Robert S. Kerr. This will be the second of the three annual Clinics at which Enyart has played a major role.

## **National Aviation Clinic Opens**

Top figures of industry meet at Oklahoma City to discuss problems facing it in realizing its full potential. .... Story on Page 7

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## **Secret Test Base Details Bared**

Lonely Muroc Dry Lake field, with huge landing area, expected to try out nearly all new experimental aircraft. .... Page 9

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## **New Canadian-designed Lightplane**

Fleet Aircraft, Ltd., announces its Model 80 Canuck, which will sell for about \$3,000, has gone into production. .... Page 15

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## **Aero Engineers Badly Needed**

Several plants, unable to meet schedules on experimental and new-design work, open recruiting campaigns. .... Page 22

★

## **CAB Merger Ruling Awaited**

Decision on American-Mid-Continent combination will establish important precedent; two somewhat similar cases cited. .... Page 34

★

## **Kentucky Feeder Airline Record**

Bluegrass Airlines cites operations as example of service possible for cities never before touched by air carriers. .... Page 35



## New World Standard

The claim is proved. Lockheed Constellations will bring new world standards in air transportation to every country on every continent. In regular scheduled service first on these great airlines:

AMERICAN AIRLINES OVERSEAS

EASTERN AIR LINES

FRENCH GOVERNMENT AIRLINES

ROYAL DUTCH AIR LINES (KLM)

NETHERLANDS INDIES AIRLINES (KNILM)

PAN AMERICAN WORLD AIRWAYS

PAN AMERICAN-GRACE AIRWAYS (PANAGRA)

TRANSCONTINENTAL & WESTERN AIR (TWA)

THE NEW AIRLINE STANDARD

# Lockheed Constellation

Look to Lockheed for Leadership  Years Ahead in the Science of Flight

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THE AVIATION NEWS

## Washington Observer



**AIRLINE RADAR**—Much of the military-developed radar navigational and landing equipment is not expected to be applicable to civil airline use. CAA and airline people don't believe it is necessary to follow the Army idea of having ground operators take complete charge of the landing, feeling that airline pilots have sufficient knowledge, experience and ability to exercise much of the authority.

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**CAP REVITALIZATION?**—Civil Air Patrol wings in several states are moving to enlist support for a CAP as a permanent part of the War Department. Setup would be roughly similar to that of the national guard. Plans outlined by some wings, among them Indiana, call for separation of housing facilities or AAF bases, ground vehicles, surplus aircraft, uniforms and annual active duty training with pay.

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**PLANT LEASES**—Some concern is being expressed by Surplus Property Administration officials over the emphasis placed by Reconstruction Finance Corp., the disposal agency, on leasing, rather than selling, surplus war plants. Some fearinging SPA people envision a period of depression, when many of the plants would revert to the government which then would have to decide whether to close them and contribute to the economic ills, or keep them in operation, thereby competing with private enterprise and defying sound socialization.

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**SALE TERMS**—SPA also feels RFC is being unrealistic in its sales terms for the plants. In the words

of one top SPA official, the value of a plant is the wealth that comes out of it. Thus a restoring SPA belief that assets should be based on expected revenues—such as was recommended for steel plants and is being considered for aircraft facilities. While industry generally approves this formula, there is some opposition so it is in Congress.

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**SURPLUS PLANES**—Informal sources believe Reconstruction Finance Corp. may discount plane sales at sales centers when present reserve stocks are exhausted. Sourcing sales when new prices and discounts went into effect depleted crater stocks and most sales recently have been from storage deposits. Should RFC replenish sales centers stocks, it would in effect pay two ferrying charges on every plane sold from a center, inasmuch as it already gives a ferrying allowance regardless of whether point of sale is a center or a depot.

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**WAGE INCREASES**—The aircraft manufacturing industry is due to get the CHO United Automobile Workers wage demands for a 30 percent increase within a few days.

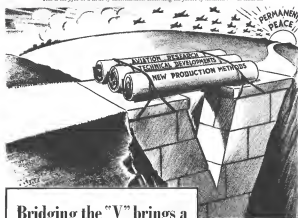
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**AIRCRAFT SHOWS**—The aviation industry, at the moment, is being plagued by promises of air shows. The situation has developed to the extent that the national headquarters of the Aircraft Industries Association is working on a plan for an approved list of shows. Members of the Association, which include most of the major manufacturers will participate only in those shows on the approved list, according to present plans.



Jet-assisted takeoff of a Boeing B-29 Superfortress





## Bridging the "V" brings a New Challenge to Aviation

THE Aviation Industry strives to speedily with Private Citizens, American Business and Government in making one nation the world's greatest peacetime air power. Only as we act with a prompt eye we look forward to permanent Peace and National Security. For modern aviation has ended all thoughts that the United States is an isolated nation.

Under wartime necessity, the advancement of American Aviation was one of the great industrial miracles of all times.

Now, the challenge of peace provides an even greater stimulus to carry on the kind of scientific research, technical development and production methods that in a few short years made our air power a decisive force in the achievement of Victory.

For the aircraft of today and tomorrow should be used for the advancement of civilization, not for the destruction of mankind.

At Bell Aircraft, our sights are aimed at getting into civilian service the same types of aeronautical skills

and achievements as were identified with the Aircoast. Of the Kingbirds, the Bell-built B-29 Superfortress and the Aircoast America's first jet propelled plane.

Bell Aircraft pledges to the Citizens, to Government and to American Business that we will naturally our research and scientific development programs. Soon we shall bring to them a new form of flying, the Bell Helicopter. "The Modern Magic Carpet" that offers door-to-door delivery... that can fly to and land in inaccessible spots reached by no other mode of travel... a helicopter with built-in, engineered stability. As in the past, now in the present, look to Bell Aircraft to be the civilian promoter of Aviation Progress.

See, Attached for U.S. and proposed foreign contracts

**BELL** Aircraft CORPORATION  
PACEMAKER OF AVIATION PROGRESS  
Buffalo 5, New York

# Aviation News

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## Top Figures Gather at Air Clinic To Discuss Industry's Problems

Engert presides as co-chairman with Gov. Kent; Wilson urges government to adopt long-term policy which will attract private financing.

Aviation's most crucial problems received the undivided attention of the industry's leaders this week at the National Aviation Clinic at Oklahoma City—a forum for all aviation interests which has gained great stature in the three years of its existence.

William Engert, president of the National Aeronautic Association, in private life president of Standard Aeronautics, as co-chairman with Gov. Robert S. Kent, of Oklahoma, opened the three-day session Nov. 15. Alfred Marcher, president of Republic Aviation, was chairman for the opening sessions devoted to the aircraft industry.

**Top Figures Attend**—Top aviation executives, and outstanding aeronautical engineers, educators, civic leaders, military and civilian flyers and aviation journalists were in attendance to discuss in general and group meetings the steps by which U. S. aviation can move from war-time to peace-time operation.

Roger E. Wilson, president of the Aircraft Industries Association and vice-chairman of United Aircraft, told the assembly, significantly, that "Obviously we are not accepting this clinic to feel the pulse of a young infant or listen to the heart of a superannuated character, but rather to assess the strength of a young young infant."

**Corbett**—He urged a long-term air policy by the government which could attract private financing and relieve itself of some direct support for the industry. This would free industry from government domination, Wilson emphasized, and provide strong incentive to competitive development in the revolutionary arts now speeded up.

This is one of the many reasons, Wilson said, why the aircraft in-

dustry is an island as favoring a new Presidential Advisory Committee on Air Policy.

**"We want no subsidy,"** he added, "but rather a good climate in which to operate fairly."

**Scrupes**—The Clinic received the first full explanation of how municipalities can take over more than 400 airports which will soon be declared surplus by the Army and Navy. A special government team of five officials attended the meetings to explain the reasons behind the new Surplus Property Administration regulations and the procedures municipalities should follow in seeking to take over the airports.

Future possibilities of mass air transportation and potential flying and unattended operations also came in for full discussion by aviation leaders qualified to give their opinions on these questions.

**Topics**—In addition, there were discussions on such subjects as jet propulsion, supersonic speeds, the release of atomic energy and others having a vital bearing on aviation's future.

Among the speakers and their subjects on the three-day program were:

**Heard**—John F. Victory, secretary of National Advisory Committee for Aeronautics, Carl B. Soper, vice-president, Lockheed Aircraft Corp., Robert H. Wood, Editor, AVIATION NEWS, Lt. Gen. I. B. Baker, deputy commanding general, AAF, William P. MacCreech, NAA general counsel, Jack Frye, TWA president, Joseph Garvick, Wiggins Airways, Dr. Louis Bolinger, Wilson University School of Business Administration, Harry Maxwell, Air Transport Association state relations manager, Glen S. Eastburn, manager Los Angeles Chamber of Com-

mmerce transportation department.

**Tuesday**—John Paul Jones, Des Moines attorney and private flyer; Arthur I. Mowman, chairman of CAA Non-scheduled Flying Advisory Committee, William D. Schumacher, public relations man and flyer, Wolfgang Langewiesche, author and special consultant to Personal Aircraft Council, William T. Piper, president of Piper Aircraft Co. and chairman of Personal Aircraft Council, Adair Marc A. Mowman, U.S.N., Wesley E. Keller, chairman of North Dakota Aeronautics Commission, Rep. Booth Lutz, Col. George C. Price, chief, AAF Office of Flying Safety, Martin Wilbur, former deputy director, aircraft division, National Aircraft War Production Council, L. Welch Page, CAA chairman, and Charles Palmer, NAA vice-president, Eugene E. Wilson, vice-chairman of United Aircraft Corp., Gill Robb Wilson aviation editor, N.Y. Herald Tribune.

**Wednesday**—Igor I. Sikorsky, engineering manager, Sikorsky Aircraft Div., United Aircraft, Sheldon B. Stover, Michigan Aeronautics Director, Dr. Frank W. Hart of the University of Calif., Dudley H. Dorr, Boston, Mass.



### WOODEN RUNWAY:

A wooden runway over 4,000 ft long and about 200 ft wide was used by the Jap during the war. They used thousands of planks about four inches deep. Capt. Robert A. Hickenhorst (above), pilot of Gen. Eisenhower's plane, says the field "is pretty bad."



**New Powered Glider:** The 16-hp motor at the rear of the "pod" of this Bowles-designed Burnblebe glider provides power for sustained takeoff, instantly "thermal hunting" and return to landing field at the end of the day's soaring. Bowles believes the addition of a motor will do for soaring what the glider did for wing.

## Bowles Testing New Powered Glider

Two-place craft has 16-hp motor to permit takeoffs and thermal-hunting; designer is enthusiastic.

The first post-war powered glider to be built and flown is being tested in Southern California by Hawley Bowles, the widely-known builder of gliders and sailplanes.

Already announced to build and market it, at a list price Bowles says will be "well under \$1000," is Nelson Aircraft Co. of San Fernando, Calif., whose president, R.

Ted Nelson, glider enthusiast Bowles is vice-president.

**Two-Place**—A two-passenger aircraft, known to its builders as the Burnblebe, the glider clearly shows its design genesis in its close resemblance to the pre-war Bowles "pod" gliders.

"I think it should do for soaring what the old-style did for flying," Bowles said after the initial test flight on a Mojave Desert dry lake.

The Bowles craft is notable as a development of the designer's original glider design. It carries a 16-hp Hughes 4-cyl opposed, 2-cycle engine running 3500 rpm at rated power; and has a hand-cranked retractable triplane landing gear.

**Features**—Essentially the Burnblebe is a sport glider in which the engine is intended to serve as an auxiliary to be started or stopped at will and provide towerless takeoffs as well as power for instantly thermal-hunting and return to point of takeoff after the day's last thermal has shed its last ounce of lift.

Bowles rates the glider's takeoff at 35 mph and climb at the rate of 300 fpm. A 2-gal fuel tank provides fuel for one and one-half hours of full-throttle flight. He reports the cruising speed to be 75 mph.

**Specifications**—The glider has a wing span of 47 ft, a wing area of 184 sq ft, an overall length of 33 ft, height of 5 ft, and an empty weight of 485 pounds. It has a passenger load allowance of 350 lb. Construction of the pod, which carries a retractable triplane landing gear, is in line contour to the tail and tail-

## All-Metal Skyfarer

Tennessee Aircraft Inc. Skyfarer division, General Aircraft Corp., at Nashville, Tenn., announced a streamlined all-metal post-war version of the two-place Skyfarer, one of two CAA-approved pre-war two-control sportproof gliders. The new version will have the same control and wingroot features developed by Dr Otto Koppen, along with approved performance and passenger comfort. Deliveries, price and performance data will be received early in 1946 after completion of distribution plan.

summer's housing of the B-17 Flying Fortress, is plywood and ply-plank. The tail is plywood, single-braced. Tail surfaces are mounted on a single hollow dural boom which also provides housing for tail control cables. Both wings and tail surfaces are easily dismantled for stowage or mounting on a trailer.

## New ACC Committees

The ACC Coordinating Committee, composed of the assistant secretaries of State, War, Navy and Commerce and the Chairman of CAA, has announced eight subcommittees and special subcommittees which are dealing into some aviation problems.

The subcommittee, with their chairmen, are: PICAO matters, Rochester Mergers, State department aviation division chief, Technical Standards of Aeronautical Charles, Laed, Canada, Search Merton, Coast and Geodetic Survey, Demobilization of Aircraft Industry, as chairman, but with T. W. Wright, Civil Aeronautics Administrator, Capt. L. D. Webb, Navy States, and Col. John G. Mears, USA, Air Force. Mile Technology, Dr. Francis Reichelderfer, chief U. S. Weather Service, Aviation Research and Information, no chairman.

**Special Groups**—Special subcommittees are: Foreign Air Bases and Rights, Joseph Waldron, State Department, Lighter-than-Air aircraft, Irvin R. Barron, director of the research bureau of CAA, Consolidation of Certain Department Publications, Ben Stein, CAA.

## Lonely Mojave Desert Test Base Will Try Out Nearly All New Craft

Army finally permits disclosure of details about secret desert field at Mono Dry Lake near Los Angeles, remote spot, with huge landing area, has high safety record.

By SCHOLER BANGS

"Top secret" throughout the war, Air Technical Service Command's Mono Flight Test Base will be the first-flight proving ground of practically all military fighters, bombers and power plants now under experimental development.

Full importance of this lonely, Mojave Desert branch of Wright Field, so thoroughly guarded by isolation that not one instance of espionage occurred, its location, at once, now can be disclosed for the first time.

**Plans**—Infrequently published reports of spectacular new warplanes being tested at "a California desert base" have been the only public indication of what has gone on at this Mono Dry Lake experimental center, established in July, 1942.

Col. Clarence A. Sheep, named by command of Mono Flight Test Base following the European invasion during which he commanded a P-36 photo reconnaissance squadron, also as some of the aircraft first flown or given accelerated tests at Mono: Lockheed's XP-48 and XP-50A, jet fighters, Bell's XP-59, first American jet plane, a series of Northrop flying wings, including the Northrop "Black Rocket" XP-56 tailless fighter. The base also has been the scene of critical and secret wartime proving tests of radio-controlled bombs and planes, and of glider "snatch" takeoffs.

**Major Base**—To those visiting MTFB for the first time the most dramatic aspect of the base is that its concrete flight ramp borders the world's largest natural "flight strip," seven miles wide and 13 miles long—the table-flat expanse of the largest of the Mojave Desert's hard, dry lake beds.

During pre-war decades Mono Dry Lake held distinction as a phenomenon of the West, a favored proving ground for racing cars, and the testing site of a series of experimental aviation airplanes and gliders, several designed for early trans-ocean flights.

**Selection**—Selection of Mono early in the war for the flight testing of military prototypes under the safest possible conditions, both physically and from the standpoint of security, is credited to Col. Ralph V. Snowdon, Jr., who, as chief of the fighter branch of the experimental engineering section of Wright Field, considered numerous other proposed sites throughout the United States and Canada. In settling up the base he had the coordinating assistance of Maj. Gen. B. W. Chidlaw, Assistant Chief of Air Staff, AAF, and Col. D. J. Keith, chief of the power plant section of Wright Field.

With one exception, Mono provided the most ideal proving ground in existence. **Weather**—It is practically free of light-interfering weather, and in early morning hours offers a seldom-varying uniformity of light conditions day after day. Conditions are ideal for long series of stabilized flight tests, and during the past year the base had only

85-100 of 1 per cent of bad flying weather. Aside from the isolation of the place, where some of the staff personnel have lived almost constantly for the past two and one-half years, and the blazing heat of mid-summer, Mono's only drawback from the test pilot's standpoint is the optical hazard of desert flying. Pilots are to the desert experience depth perception difficulties, similar to those of ocean slick landings, in their Mono landing approaches, and the lake's margins can be as vicious as they are featureless.

From the standpoint of "necessity," Mono has proved to be the near-perfect safeguard against leaks on the dimensions, power



Col. Clarence A. Sheep

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From the standpoint of "necessity," Mono has proved to be the near-perfect safeguard against leaks on the dimensions, power



**The "Burnblebe's" Body:** Front view of the Bowles-designed Burnblebe powered glider, shows the retractable triplane landing gear, the plywood fuselage and the two-place side-by-side cockpit. Tip of propeller may be seen at rear of "pod."



**First Published Photo of Secret Base:** This air view of Mono Flight Test Base, looking south, shows hangars, shops, barracks and the short taxi-strip leading across the world's largest arid field—seen by 12-mile Mono Dry Lake. The long paved runway is for service and ferrying planes. Over the mountains in the horizon lies Los Angeles.

Based on Anatra's new single engine fighter, the XF5U-1, can be utilized as a fighter, torpedo plane, bomber, attack plane, interceptor or in many combinations of these roles.

It was developed for the Navy in contrast to the desirable features of many currently used aircraft. Among its unusual features are: a gear change power egg (like engine and oil engine accessories) for ease of maintenance; completely retractable tail wheel and scissor hook; and radio equipment in a parcel which can readily be installed or removed from the plane.

**Two Propellers** — The new craft is said to be the first fighter designed for use of constant-rotating propellers. Its two 14-in. diameter Aero-Trop propellers are driven by a 1,000-hp, 14-cylinder Pratt & Whitney turbo-compound engine which provides a maximum of 3,000 horsepower and a service ceiling comparable to Boeing's two-seat F-105. The new fighter is powered by a turbojet engine with afterburner and Superboost. Armament consists of six 20-mm cannons mounted in the wings. Six 56-caliber machine guns are substituted without any structural change in the wings.



**New Boeing Fighter:** Contra-rotating propellers are the most outstanding innovation of the single engine fighter developed for the Navy by Boeing Aircraft. A 35-cylinder Pratt & Whitney air-cooled engine drives two 135-foot diameter Aero-Prop propellers, and provides a maximum of 3,600 horsepower resulting in a service ceiling comparable to Boeing's F4B Corsair and Superfortress.



## AVIATION CALENDAR

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Arnold Haller Hotel Washington, D. C.

Wright Brothers, Leizure, Washington  
1962

## CAA Builds Irish Seacrest

Civil Aeronautics Administration engineers have built a radio range and communications station for the Irish Government at Foyens. The job was supervised by John Doland, airways engineer, and John Lewis, signals engineer.

## Safe Testing of Supersonic Planes Seen in New Radio Control Device

AAF and Bell reveal satisfactory flights with one *Airacrest* controlling another, and ground truck taking over for landings; flight operation data is recorded on ground via television, making test pilot's role unnecessary.

Human-control flight tests of high speed airplanes may prove the step by which aircraft research experts can surmount the formidable barrier of sonic speed.

By using radio-controls refined from those previously used for target planes and guided missiles, AAF and industry researchers already have accomplished high-speed flights with the jet-propelled Bell P-59 *Aeroserv* remotely controlled from another plane or from a track on the ground.

**Method**—According to an announcement by Bell Aircraft Corp., two *Aircorpsmen* were used in the experiments, one as mother plane, and the other as controlled or robot plane. In all the flights thus far, a safety pilot has flown in the cockpit of the controlled plane prepared to operate it in the event of failure of radio controls.

Besides the radio controls, an important part of the experimental flights has been the transmission of flight operation data from the controlled plane to recording instruments on the ground, by television and telemetering devices. The tests have been carried on for the last several months by Air Technical Service Command and Bell researchers at Wright Field, Dayton, Ohio.

► **New Approach**—Projection of high speed radio-controlled flights and automatic transmission of flight data indicates an entire new approach to the technique of flight testing, which has changed only in minor degree since the 1920's when Lt. Jimmy Doolittle was making his pioneering pull-out tests at old McCook Field, in Dayton.

It may be entirely possible to fight-test a radio-controlled plane to destruction if need be, in a high velocity dive which will determine the plane's reaction to supersonic speeds, and provide the designers with badly-needed information about the type of airfoil and design which can fly at these speeds. Yet such a radio-controlled fight could be accomplished without hazard to the test pilot, and their

data would be reported automatically to a ground station up to the moment the plane disintegrated or crashed.

**F Controls**—The plane is controlled by a device similar to an autopilot known as a "rate" pilot, which is effective in diving and sharp turns as well as in level flight. Throttle, flap, landing gear and brakes are actuated by electric motor units, which are operated by impulses from a radio receiver in the command plane.

By manipulating a control box, which transmits the proper impulses to the controlled plane, a pilot in the mother plane, or in the truck on the ground, can warm up the robot plane, taxi, takeoff, climb, fly level, bank or turn, dive, loop or make any other maneuver, and then land it.

## Army Drops Controls Over Airline Activity

Regulation of commercial air operations was back on a peacetime basis last week after Secretary of War Patterson signed a letter ending war-time controls over the air service pattern, retroactive to Oct. 29.



**Radio-Controlled Jetplane:** A radio fighter is shown making a landing controlled from the truck on the right. The mother plane, another A-100, is in the background.

## Control Towers

Actions to keep in operation airport control towers, money for which has been withdrawn by the Army and Navy (Aviation News, Nov. 5), is now up to the Budget Bureau. CAA has asked the Bureau to approve an immediate appropriation of \$1,500,000 for staffing 60 towers in the first six months of 1966. In its 1965 budget, CAA is asking for \$3,121,000 for operating 110 towers.

During the war, CAA maintained 100 towers for the armed forces. Decreasing military traffic will mean, discontinuance of 15 of them, but expanded airline traffic will necessitate 20 new ones.

The action means the contractors now can decide for themselves—without necessity for War Department approval, solely tacitly administered through the Civil Aeronautics Board—the timing and number of schedules they will offer, type of equipment they will use, number of stops at a certified point, and extent of charter operations.

▸ About the only control remaining under Executive Order 9874, in fact, is that under which the airlines still must go to the Army if they wish to use Army air fields. Army sources say the order, under which priorities and service patterns controls were instituted, probably will continue on the books, though only an emergency will evoke it.



**Radio-Controlled Jetplane:** A radio-controlled Bell P-39 Airacomet jet fighter is shown making a landing at Wright Field, Dayton, Ohio, controlled from the truck on the ground. It also can be controlled by the mother plane, another Airacomet, flying above it.

## Illinois U. Airport Is Commissioned

\$2,250,000 development dedication Gov. Green and Sen. Levin urge aerial ROTC program be pressed.

An important step in aviation education has been taken with the dedication of the University of Illinois Airport, with ceremonies at an air show which were attended by approximately 40,000.

Gov. Dwight H. Green and Senator Scott Lucas united in urging that flight training of students be a major objective of the University airport program, and they recommended, particularly, that the field be utilized for aerial ROTC training for the armed forces.

**Cooperation**—Gov. Green said he did not expect the University to revolutionize aviation and added he was well aware that perhaps higher education had been a little slow in catching up with aviation's prodigious development.

"But if the research facilities here developed can help the airlines study any specific problem, they will be available to them," he said. "Similarly, I hope they (the airlines) will give the University the benefit of their experience and practical knowledge as it develops its program."

**Credit**—Park Livingston, president of the University Board of Trustees and University President A. C. Wilford gave Gov. Green primary credit for the \$2,250,000 airport, because of the Governor's cooperation in passage of necessary legislation and the appropriation of state funds. Also recognized in this connection was Senator Lucas, who aided in federal funds, \$1,800,000 in federal funds,

toward the total.

Other expenditures will be necessary for airplanes and equipment for maintaining and flying them and for a heating plant and engine laboratory. The present hangar, obtained from a government field at a cost of \$55,000, was purchased because of the security of materials. It was dismantled, shipped to the University airport and reconstructed within twelve weeks.

**Facilities**—The site, six miles from the campus, is located in the center of a four-square-mile area adequate for future expansion.

The airport has an area of 743 acres, larger than the present Chicago Municipal Airport. Other details include runways—three paved with concrete, each 5,300 ft long, 150-ft wide, slab 5 inches thick; one, turfed, 4,000-ft long, 150-ft wide; taxiways—paved with concrete, 20-ft wide, total length 12,000 ft; slab, 9 inches thick. Both runways and taxiways will sustain a gross plane load of 100,000 pounds for continuous operation. International landings and takeoffs of planes weighing 130,000 pounds could be accommodated.

**Buildings**—The total paved area is 331,046 square yards. The hangar is 280 ft long and 100 ft wide with 600 ft of 30-ft taxiway to be used for classroom and laboratories.

Members of the University's Aeronautical Advisory Board include W. J. Blanchard, general manager, Army Ordnance division, General Matsumi, Air Force, United Airlines; L. R. Inwood, executive assistant, TWA; J. E. Schaefer, vice-president, Boeing, Wichita division; Col. A. D. Triffle, medical director, United Airlines; and Bruce Uhlen, director, aviation education service of the CAA.

## AAF Cut Restored

The Senate Appropriations Committee has recommended a restoration of \$63,800,000 of the \$13,108,312,600 dropped from the AAF appropriation by the House in reporting out the first appropriation revision bill last week.

The restoration includes \$45,500,000 for aircraft research and development, \$864,300,000 for operations expenses and \$700,000,000 for personnel pay. On July 31, the AAF had an unobligated balance of \$7,633,034,141. Recovery through reimbursement and cancellation will boost this to \$25,605,032,718.

The restoration bill reported \$11,312,600 will be turned back, leaving an allocation of \$1,860,282,719 for the remainder of the fiscal year ending next July 30.

## Veterans' Complaints

A check of more than 150 veterans of military aviation service who attended a recent meeting in St. Louis sponsored by the Aviation Foundation, revealed that although aviation jobs were the top objective of the men less than two percent were so employed and more than 85 percent had no jobs at all.

One veteran asserted part of the fault lies with the United States Employment Service, charging the agency does not include classified personnel with aviation experience and has poor liaison with the aviation industry.

**Advice**—R. J. Witt, Foundation executive secretary, advised the men to round out their training to prepare for aviation employment as opportunities develop.

## Interest in British Jet Work Stimulated

Interest in British gas turbine development has been stimulated by two recent developments—the 606-mph record set by a Gloster Meteor fighter and the selection of Air Commodore Frank Whittle to give the first annual James Clark Maxwell Lecture on the Institution of Mechanical Engineers.

The lecture, entitled "The Early History of the Whittle Jet-propulsion Gas Turbine," outlined Whittle's work from 1934, when he decided to build a gas turbine for an aircraft, through the successful testing of the first flight article in May, 1941.

**Record Flight**—Although the Meteor which set the new record had been stripped of armament and given a high wing finish, and the Rolls Royce Derwent turbo-jets were reported as having been "sapped up," there was nothing special about its flight.

It has been estimated the power developed by these units would approach a combined total of 8,600 at the 603-mph speed (on a turbo-jet, one pound of thrust equals one horsepower at 275 mph). When it is considered that the combined horsepower of four Wright Cyclone 15's in propelling the Meteor against an Superfortress, Constitution or Zero is not much more than this, one need not be surprised that a new speed record by a single-seater fighter was chalked up. With all that power, it is hardly to be wondered that the Meteor has been given

**Development**—Now is how the Derwent was developed. The early Whittle engines were characterized by "reverse flow" combustion. Air compressed by the centrifugal impeller entered one end of the combustion chamber, was mixed and burned, forced back around a sharp bend and exhausted from the same end it entered. The General Electric I-A unit (developed from the Whittle WTR) and the improved I-16 (developed from the later W 2466) followed the reverse flow pattern. One of the Whittle series was given to Rolls Royce in 1941 so as to get quantity production as rapidly as possible for the then newly designed Meteor. The Rolls Royce engine was called the Welland, but as the "reverse flow" turbo-jets, noted after various rivers in England.

In the meantime, Maj. Frank B.

## P-80 Speed Test?

The hurried trip of a top Lockheed executive to Wright Field may result in a challenge, within the month, of Britain's newly claimed jet speed record by the Gloster Meteor. The Gloster Meteor topped 600 mph, in forced record flights, Lockheed officials have been helped by some saying that the P-80 Shooting Star jet be aimed at the British speed crown.

The belief is strong in the Lockheed organization that a P-80 could do the job Lockheed, however, is stirred by the Army, which is daily now allowing disclosure of the Shooting Star's jet speed. While Lockheed officials have been reluctant to observe the Army edict, the rumor exists in the vicinity of Wright Field that a P-80 once made a demonstration dash that ran at a speed of 714 mph.

**800**—If the Army releases, and Lockheed believes it, P-80 can break the British record. It is likely that the table-setting expense of Meteor Dry Lake in the Mojave Desert would be chosen for the record attempt.

Halford, designer of the well-known Napier Sabre engine and now chairman of the Cleveland Airplane Engine Co., had designed the H-1 turbo-jet. This unit was more powerful than the Welland, and while not on the Whittle principle, it does have in common some important design details, notably the single-ended impeller instead of the double-ended impeller, and "extrajet flow" or "reverse flow" combustion, rather than reverse flow. This eliminated the sharp bend, permitting a smaller diameter for the unit as a whole and a more reversible flow.

**Refined**—The H-1 underwent further development and was named the Goblin, becoming the power plant of the de Havilland Vampire on which both American and British fighters served, and the engine company) worked closely together for a tailer-made design. The Vampire is regarded as potentially faster than the Meteor.

The through-flow combustion of the H-1 sold itself so well that it was adopted in the Rolls Royce Derwent (another of England's

revers), set up as a replacement for the Welland, and currently installed on the Meteor.

The General Electric I-40 (now designated J-35) also employs the through-flow combustion principle. Further developments are under way for both Gobblin and Derwent, awaiting a modification of the latter for use in Washington ("Woppy jet"). Other Rolls Royce turbo-jets are under development, and at least one is in production, the Kestrel (still another river), reported as the most powerful gas turbine for jet propulsion now in production anywhere. All are of the centrifugal flow type.

## Nelson Appointed To Menasco Post

Former WPA official named Eastern manager, TWA announces seven personal changes including choice of Warner as publicity director.

Seven appointments by Transcontinental & Western Air, Inc., all in the Intercontinental division, a former government official joining Menasco, and an executive appointment were personal changes noted during choice of Warner as publicity director.

**Henry F. Nelson**, former director of the Aircraft Division of the War Production Board, has been appointed eastern manager of Menasco Manufacturing Co., with headquarters in Washington, where he served with the WPA for five years. He was director of the automotive conversion program on special assignment.

**William H. Schubert** has been named treasurer of Menasco since April 15.

**Reg. Gen. T. R. Wilson**, TWA branch chairman, announces the following appointments in the Intercontinental division:

**Edna Mae Patterson Warner** has been made publicity director. He has been serving in a civilian capacity with the Civil Control Service in Europe. Warner was on Time magazine at its outset, and later on the Cleveland Plain Dealer, the Washington Post and Washington Times-Herald.

**Hayden Robert Jordan**, formerly assistant to Gen. Wilson, is made regional manager for France, Belgium and Holland, with headquarters in Paris. **Richard Menasco**, who has been in airline activities since 1928, has been named regional manager for Italy, with headquarters in Rome. **Robert**

University of Illinois Airport: Aerial view of the 743-acre airport. Hangar is at the left. Administration building will be located just beyond the taxiway.

way. Airport has four functions—education and research, commercial service, private flying service, and military training.

12—HEADLINE NEWS

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**Regionalism**, special assistant to the chairman of the board, becomes regional manager for England, Scotland and Scandinavia, with headquarters in London. **John Logan** has been named regional manager for Europe with headquarters at Dublin. Logan has been in charge of the company's international division activities under contract to the ATC at Freetown.

► **Khadi Tardin** has been named traffic manager at Casco. Khadi was with Pan American Air Services in Miami, before being commissioned into the Army. **Pierre Desaulh**, formerly traffic manager in Washington, has been named traffic manager for Switzerland and is based at Geneva.

## Separate Agency Asked For Aviation

Chairman Clarence Lee (D-Calif.) of House Interstate and Foreign Commerce Committee, in collaboration with other members of the committee, has drafted a 25-page bill providing for the establishment of an independent Civil Aeronautics Commission.

Although the date for introduction of the bill is still indefinite, Lee reports that it will be the next piece of aviation legislation to be taken up by his committee.

► **President**—The bill, in general, follows the principles of the independent Civil Aeronautics Authority created by the 1938 CAA Act, Lee said, establishing an in-

dependent civil aeronautics agency and an independent air safety board. The designation "commission" is being used, instead of "authority" to align the proposed aviation organization to the other quasi-judicial, quasi-legislative agencies of government, such as Interstate Commerce Commission, Federal Trade Commission, Federal Communications Commission, etc.

The bill is not an omnibus aviation bill, and deals exclusively with the organization and functions of the proposed Civil Aeronautics Commission.

Meanwhile, the position of the President on the set-up of the Civil Aeronautics Authority has narrowed down to two possibilities: organization of CAA under the Commerce Department, as it now is, or its placement under the Interstate Commerce Commission.

► **Presidential History**—Becoming President, Mr. Truman has made no statement indicating that he proposed transferring the CAA to the ICC. However, as late as last year, Truman called for an overall regulatory transportation agency, which would be the equivalent of placing CAA under ICC.

Under the reorganization bill which has been passed by the House and is now up for action in the Senate, Truman would have power to switch CAA to ICC.

Truman has indicated opposition to the proposition of an independent civilian agency embodied in the bill drafted by Lee. Hollick's bill is a one-page piece of legislation simply rewording the CAA to its status under the 1938 Civil Aeronautics Act, prior to its 1940 reorganization, as a part of the Commerce Department. Lee's 25-page bill goes into detail in defining the duties and functions of the officers and subdivisions of the proposed Civil Aeronautics Commission.

## Correction

The caption of a photograph used with an article in the Nov. 12 issue of AVIATION NEWS describing Aerotec Engineering Corp., identified Aerotec's sales manager and chief test pilot as E. E. Wilson. The caption should have identified him as E. E. Nelson.

## Philadelphia Terminal Due To Close Dec. 1

Northwest Airport, opened less than six months ago as Philadelphia's major wartime air terminal, is slated for closing Dec. 1 in a survey reportedly submitted by the six major airlines serving the city. The findings have not been released, but their substance was outlined by an airline's official.

The new airport, the survey disclosed, came off a poor second to Southwest Airport in favor of both commercial shippers and individual passengers. Northwest's \$3,000,000 worth of equipment and facilities, the official indicated, may be allowed to lie idle until the city's air traffic expands sufficiently to make use of them again.

► **Mail**—The Post Office will transfer its air mail services to Southwest on the same date.

Northwest Airport was rushed to completion and finally opened last July 1 after extensive delay due to lack of funds for passenger, mail and cargo facilities. In December, 1943, a Government order had closed Southwest Airport for military reasons.

## San Diego Air Show

A partially completed flying automobile, the Roadster, designed by Herman V. Davidson, former Consolidated Vultee engineer, had its first public showing last week at the San Diego "Aeroconco." Davidson says he plans to build the plane himself commercially, put it in the market within a year.

► **The two-place land-and-air craft** has detachable wings which are left at the airport when the ship is used as an auto. It is powered with a 75-hp pusher engine, has tricycle landing gear, conventional controls and 35-52 wing-span.

Other exhibits included the experimental Perimeter Biopropeller (Aerotec News, May 25-June 4) and several more conventional new model lightplanes, representing 12 manufacturers.

► **More than 10,000** paid to see the air show which the sponsor, San Diego Junior Chamber of Commerce, said would be made an annual event.

## PRIVATE FLYING

## First Post-War Canadian-Designed Lightplane Goes Into Production

Fleet Aircraft, Ltd., announces its Model 80 Canuck is expected to sell for "just over \$3,000," says tests reveal very fine flight characteristics.

By ALEXANDER McSURELY

A high-wing strut-braced two-place monoplane of fabric-covered metal construction is the first Canadian-designed post-war personal plane to go into production. Designated the Model 80, or Canuck, by its manufacturer, Fleet Aircraft Ltd., Port Erie, Ontario, the plane is expected to sell for "just over \$3,000" powered with a 75-hp Continental Lycoming or Franklin engine at the purchaser's option. A fixed pitch propeller on the prototype may be replaced by an adjustable pitch prop, and the electric starter also will be optional equipment.

The manufacturer quotes a 190-mph. cruising speed for the plane with 75 percent of power, and a top speed of 100 mph. with stalling speed at 45 mph., a 500 feet per minute rate of climb at sea level, a 13,000 ft. service ceiling, 400 mile cruising range and 25 miles per gallon cruising fuel consumption.

► **Viability**—Viability has been stressed in the design. The engine has been mounted at an angle which offers good visibility straight forward, even with tail-wheel touching down. The side windows extend back to give the pilot 250 degrees visibility in a standard plane, while the trans-

parent windshield panel is mounted in a skylight effect overhead which provides 150 degrees visibility from the oval to the sky above.

The plane is built more sturdily than many American lightplanes, being designed throughout to withstand seven G's, permitting

full acrobatics by U. S. factors, the manufacturer reports. The Canuck has been subjected to 50-mph. velocity dives of 170 mph. without appreciable flutter in the airframe.

► **Spies**—Flight characteristics are the subject of enthusiastic comment by Fleet designers and test pilots. They report the plane will fly level over the test course at 60 mph. three miles above stall speed. In spin tests 125 pounds of lead were loaded 90 inches behind the center of gravity yet after a 15-turn spin the plane recovered in less than two turns with hands off. As the plane slows to stall speed a tail buffeting grows warning, while at the stall the nose drops slightly and recovers can be made in power-on stalls with a loss of only 50 feet altitude. Control force must be used to maintain a spin.

In trimmed flight, the plane reports, the plane can be controlled



First Canadian Post-war Personal Plane Design: Unusually good visibility and otherwise conventional line characterize the first post-war Canadian lightplane design to go into production. The two-place plane, the Model 80 Canuck, built by Fleet Aircraft, Ltd., Port Erie, Ontario, is shown above in flight, and below at its home plant with company officials, left to right, Walter H. Deisher, vice-president and general manager, George Otter, chief engineer, and A. Cagge, production manager.





## Canuck Data

Performance data and specifications announced by Fleet Aircraft Ltd. for the two-place Model 30 Canuck include:

Span—34 ft.  
Height—4 ft. 6 in.  
Length—32 ft. 6 in.  
Landing gear track—72 in.  
Wings  
Powerplant—73 hp Continental  
Weight empty—250 pounds  
Gross weight—1,425 pounds  
Fuel capacity—35 gal. main  
Top speed—130 mph.  
Cruising speed—100 mph.  
Stall speed—45 mph.  
Range—430 miles  
Fuel consumption—4 gal./hr./hour

laterally and directionally by use of ailerons alone, by rudder alone, or by a third unique method manipulating the doors.

**✈️ Cockpit**—The cockpit is described as roomy for two persons, side-by-side, with large baggage compartment behind the seats. Empty, the plane weighs 256 lbs. with

gross weight of 1,425 lbs. The useful load includes pilot and passenger, 340 lbs., fuel and oil, 125.5 lbs., and baggage and extra equipment, (including starter and fire extinguisher) 104.5 lbs. The two doors are wide for easy access of passengers and have sliding windows.

Two-seater Goodyear or Firestone brakes and a Scott steerable and full swiveling tailwheel are installed. Full dual controls are provided, with option for stick or wheel control. The plane has been designed with special attention to easy accessibility of vital parts for adjustment and maintenance. It is offered optionally with wheels, skin or fabric.

**Other Models**—The manufacturer expects the Canuck Model 30 to be the first of several personal planes which it will produce. The company has been operating in Canada since 1930, having manufactured among other planes the Panch biplane primary trainer, the Fort monoplaner primary trainer, the two-engine Model 80 freighter, and under license the Fairchild M-42 or Cowell primary trainer for the Royal Canadian Air Force.

## Plant Aids Club

Plans to make its new Lonsome Solitaire available to the non-profit Solitaire Plant Club of Lonsome Airplane Corp., employees at Defon, have been announced by Leopold H. P. Klotz, Lonsome president. Club members will be permitted to fly direct working hours and replacement parts and hangar storage will be supplied at low cost to encourage as many employees as possible to learn to fly. The company conducted a similar flying club among its employees before the war. More than 30 members already have indicated their desire to participate in the new club.

## Pre-cut T-hangar Put on Market

A pre-fabricated T-hangar for personal plane owners and small airport operators which can be supplied with or without two additional rooms for shop and office space at the rear of the hangar, has been announced by Washburn Manufacturing Co., Trenton, N. J. The company, headed by R. H. Washburn, former sales manager for Lonsome Airplane Corp., has already placed one of its hangars on display at the Princeton, N. J. airport.

Wooden structural members, sheathing and roofing are pre-cut, ready for quick assembly and designed for lightness to reduce shipment costs. The main truss is made in three sections and stressed for maximum loads.

Roofing is corrugated galvanized sheetmetal, and the structure is in sections of Nomosol structural board, resistant to weather. Hangar doors are overhead type built in three sections, operating on rollers and counterbalanced to permit lifting with minimum effort.

**Two Sizes**—Two sizes of hangars are being produced, both with outside width of 40 feet. The smaller hangar, designed for lightplanes, is 24 feet deep, has a door clearance 35 feet by 7 feet 8 inches. The larger hangar which will accommodate Waco, Stearman and Fairchild planes has 36-foot clearance, 9-foot 8-inch door height and depth of 35 feet. The office or workshop rooms when supplied with this hangar measure 12 feet by 16 feet each.

## Land-Water Base In Michigan Typical

Small field beside lake provides for both types of aircraft, with shops and hangars used jointly.

Typical of the small inland seaplane bases which may be expected to become more numerous in the next few years is the Austin Lake airport and seaplane base at Irons, S. Woodhouse, ten miles south of Kalamazoo, Mich.

Woodhouse had been operating charter service and flight instruction at Kalamazoo Municipal Airport until 1936 when he decided to open his own field on a farm his family had owned since 1912. His field has a 2,300-ft. North-South runway, a 2,900-ft. East-West runway (both turf) and a half mile of lake frontage for seaplanes. Hangars are near the lake, and the seaplanes are housed out of the lake at night and "stabled" with the landplanes.

**Private Base**—A traffic problem during a CPT program at the small field caused the use of floatplanes by one group of students. The program was successful, but was later discontinued and since that time the seaplane base has been operated mainly for private pilots.

The lake is large enough to provide a two-mile "runway" in one direction with adjoining lakes nearby on three sides in case of forced landings. Because of shallow water the waves never get large enough to cause taxiing difficulties. Woodhouse reports, and gusty conditions are almost nonexistent.

**No Boating**—There are no large boats speed boats on the lake to interfere with the floatplanes and amphibians. Most of the time he has been operating from three to six float planes. A large group of general pilots in this area are anxious to own seaplanes and use them in hunting and fishing trips to lakes further north, away from other means of transportation, Woodhouse reports.

Currently the seaplanes are handled by a dolly and a tractor. Post-war improvements, as soon as material and labor permit, will include a ramp and improved dolly so that the plane may be hoisted up on its own power. Woodhouse also is planning to construct a group of overnight cabins and a restaurant which is scheduled to be ready next summer to serve tourist pilots.

## Production of 40,000 Lightplanes In Next 12 Months Indicated

Continental Motors Corp. president says his firm alone has orders for delivery of 34,759 motors, or about 90 percent of all manufacturers' proposed plane output.

On the basis of orders for 34,759 Continental four and six-cylinder aircraft engines, to be delivered within the next 12 months, C. J. Reese, president, Continental Motors Corp., Muskegon, Mich., predicts a total U. S. production of between 35,000 and 40,000 lightplanes in that period. Dollar volume of this production would be close to \$100,000,000.

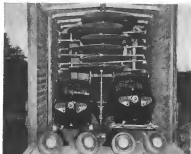
A survey conducted by Continental indicates that this company will supply powerplants for 90 percent of all personal planes built next year, in ranges of \$5 to 165 hp.

**Production**—If this volume is

reached it will mean that the lightplane manufacturers will produce from 50 to 60 per cent more personal planes in the first post-war year than were in existence in the country before the war. There were 24,134 registered private planes in 1945. Present registrations, including surplus planes converted to private use amounts to approximately 31,900.

Reese based his dollar volume forecast on an average sales price of approximately \$2,500, although a number of the planes will be priced around \$2,000.

**Advantages**—Six plane builders expect to make from 3,000 to



## TAYLORCRAFTS TRAVEL BY RAIL

First carload shipment of Taylorcraft personal planes since 1941 left the Allentown, Ohio, plant last week by rail to Northwest Aircraft Distributors Corp., Vancouver, Wash. The standard railroad boxcar contained six complete planes with tools, straps and landing gear removed and stacked as shown in one-half of the car above. Planes were packed 63 hp. Model BC12Ds. Taylorcraft expects to deliver 600 planes by year's end, after which production schedules will move "sharply upward."

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**Seaplane-Landplane Base**—At Austin Lake, near Kalamazoo, Mich., Irving P. Woodhouse operates a personal plane airport with both land plane and seaplane facilities. Proximity of landing field to lake makes it possible to use hangar facilities and shops for both land and seaplanes. At anchor at Sikorsky S-29 single-engine amphibian. Below: Aerovacs and Taylorcraft floatplanes are parked on beach, while Fairchild 24 and another Aerovacs are "tied down" to anchored floats off shore.



4,990 airplanes apiece, in the first year, he said.

Besse pointed to advantages of mass production made possible by the larger volume, in use of special purpose machine tools for engine. This together with simplification of design to achieve a high degree of parts interchangeability between 4-cylinder and 6-cylinder engines is making possible important gains in manufacturing efficiency, he said.

## Tour May Draw 1,200 Lightplanes

At least 1,200 private planes from all states are expected to participate in the revival of the annual winter lightplane tour to Florida which will be held Dec. 26-Jan. 30.

The Gulf Oil company will provide free gasoline and oil to air tourists in planes of 120 hp or less for the fifth time since the tour was started in 1937. Largest previous participation was 1,400 lightplanes in 1941.

**Details**—Eleven plane manufacturers are participating in the tour—Aerocraft Gliders, Luscombe, Piper, Taylorcraft, Stinson, Engineering & Research Corp., Calver, Commonwealth, Pank and Marlow. Flyers desiring to participate will receive questionnaires of eligibility to 100,000 plane manufacturer. Invitations are being issued by the plane manufacturers, and as soon as acceptances are received, carrying books for gasoline and which will be issued at more than 50 airports en route to Florida and return, will be sent out.

The tour is set up to permit the flyer to plan their own departure, landing, and length of stay at their convenience, to get as much benefit out of the cross country flying experience as possible.

**Simplified**—The 1937 tour, first in the series, was arranged so that planes gathered at specified points along the way and were guided to their destination by wing leaders. Later tours however have been handled without the mass flights, simplifying service problems and eliminating overcrowding of landing and takeoff facilities.

The 1940's dates include the dates of the All-American Air Meets at Miami, Jan. 6-8, which many of the air tourists are expected to attend.

## Briefing For Private Flyers

Aeronautical Training Society, which includes among its members most of the biggest airport service operators and schools, is being asked to expand its membership to take in additional members. Up until now the society has been its membership to include only the original civilian flight school operators who provided training for AAF cadets, WASPs, and cadets from some other countries. However, with the last training program ended some time ago, it appears likely that ATS may change its name and take in additional members to become a peacetime spokesman for a larger group of operators. This would require membership action, presumably at the annual winter meeting, or if it is deemed serious enough, by action of the board of directors and a final vote of the membership. The metamorphosis appears logical in view of the retrogression of National Aviation Trades Association, and the fact that most of the operators most financially able to support such a group, already are ATS members.

**NORTH AMERICAN STRAW**—"Straw in the wind" was the publication in the North American Aviation, Inc., "Skywriter," recently, of the photo of Ken Bowen, who has been assigned as project engineer on a new North American "non-military airplane." The plane may well be the four-place low-wing monoplane which North America is reported preparing for entry in the personal plane market. ("Aviation News," Sept. 26.)

**CAP SEARCH MISSION ACCOMPLISHED**—Two lightplanes of the Cleveland, Ohio, Civil Air Patrol group were sent out recently at Coast Guard request, to search for a ship which had been missing on Lake Erie since the night before, after a search by surface vessels was unable to find the crippled vessel. Within 10 minutes of their arrival at the probable location both planes spotted the tug, independently. They returned to the Coast Guard lifeboat, at a beach station, signaled it to follow, and circled the tug until the rescue boat arrived.

**AIR MARKING SURVEY**—A complete aerial survey of Connecticut to determine the best locations for painting of air markers to guide other flyers, has been started by members of the Connecticut CAP state wing. The State Aeronautics Commission is cooperating.

**STUDENT PILOT GUIDE**—CAA has prepared a seven-page digest of information on rules and requirements for safe operation of aircraft including all information needed by student pilots to pass their written tests. The digest urges the continuing of study beyond the bare essential requirements of a private license. The student pilot guide may be obtained from the CAA Office of Aviation Information, Commerce Bldg., Washington, without charge.

**PARKS TO HANDLE BENDEX**—Parks Aircraft Sales & Service, East St. Louis, Ill., has signed to distribute BenDEX "Lightweight" personal plane made throughout its territory—Illinois, Indiana, northern Ohio, Missouri, Kansas, Iowa and Nebraska. In addition, handling the equipment at the five Parks bases in the territory, Oliver L. Parks, head of the organization, is appointing additional dealers in the territory to sell and service the planes and some to handle sales only on a package-pools basis, without service facilities.

**38 YEARS OF FLIGHT**—At Muskegon, Mich., last week, fellow pilots paid tribute to Cecil R. Stencel, who still is active as a flight instructor and CAP member, on the 38th anniversary (Nov. 15) of his first solo flight. Stencel was a flight instructor in both World Wars I and II, was a former aerial photographer, government aircraft inspector, bombardier, stunt flyer, transport pilot, and test pilot for Henry Ford. In 1937 he came to Muskegon to establish his own flight school. He first became interested in aviation in 1909 when he entered an exhibition biplane to flying condition after a crash. He worked with several other pioneer plane builders on several planes and finally made his first solo after 2 hours 50 minutes dual time.

—Alexander McFarley



## Battle Veteran with a Bright Future

This is a fighting Aeroprop, one of thousands used on Allied air armada. With the war over, its battle performance now assures it an equally brilliant future.

The lightness, strength, and simplicity of the General Motors propeller adapt it to the exacting standards of commercial use. Its automatic, constant-speed operation, compact unit construction,

and ribbed-steel hollow blades are among other Aeroprop features important to peacetime flight.

The Aeroprop continues to benefit by intensive research, engineering, and production development. That means continued improvement to meet changing needs. As it stands today, however, the war-proved

Aeroprop represents basic achievements in propeller design and operation that will contribute greatly to flying's future.



**Aeroprop Advantages**—Lightness for payload. Strength for safety. Simplicity for easy service. Faster Automatic Pitch Change for flight efficiency. Full Protection for engine protection. Engineered for reliability.

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## WHAT'S BEHIND THE NEW

# Martin 202 Transport

Martin's work by 150 engineers... more than a million dollars in engineering and development costs... help explain why the Martin 202 is the longest aircraft building experience in the industry... 39 years long. The history of Martin is a record of development of new and better types of aircraft... which time and again have rendered obsolete all comparable aircraft of their time. We show also a few of many Martin planes... which have helped write the record of aviation's progress. Now, out of this rich background, Martin presents the 202... a plane which takes in a new era of progress and profit for the flying public. We give you more facts about this great new luxury airplane in the box below.

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## SOME OUTSTANDING FEATURES OF THE NEW MARTIN 202

- Cruise at a speed approaching 300 m.p.h.—speed of 300 m.p.h. faster than present day transport.
- On a 230 mile trip, barely legs, almost flying, extra reduction of operating cost, six less than one and one-half.
- Valuable interior accommodations, 30 to 42 passengers in luxury transport by means of the largest airplane in line flying today.
- Unusual passenger comfort assured by comfortable, easy seats, plenty of head room and leg room, large windows, good air heating, ventilation, sound proofing and lighting.
- Has for more engine and horsepower (225 cu. ft.) than any transport of comparable size.
- Three large exterior doors and two large doors between passenger and cargo compartments, permit quick loading and unloading to get waiting time at a minimum.
- 1000 cubic feet every new electronic device, including radio, to permit all-weather flying.
- Substantial and improvements as retractable wing propellers, heat exchanger, landing gear, wing, tail, landing gear.
- Available during fuel oil, oil maintenance and contribute to safety.
- Equipment is located below floor, easily accessible for servicing through exterior lockers.

• The Martin 202 is engineered specifically to meet Air Transport Association specifications, but just designed for the airline but by the airline—custom built by Martin—in the most exciting aircraft of the air transport.

## Private Plane Center Mapped at Tampa

Plans for conversion of Peter O. Knight airport, at Tampa, Fla., from an airplane terminal to a private plane center, following the transfer Dec. 1 of airline activities to Duce Field, developed for AAF use during the war, are being completed by the Hillsborough County (Fla.) Aviation Authority. It is expected the transfer will be made whether or not the army releases Duce Field to the authority on that date, since an agreement is already in effect for joint use by airlines and the army.

The authority will rent airport land at the private plane center to individuals and firms, on a ten year lease for construction of buildings to house plane supply stores, repair shops, aviation schools and other facilities. On expiration of the lease the buildings would revert to the airport. Several individuals and firms already have indicated their willingness to construct buildings under such an arrangement. Meanwhile the authority plans to construct an operations building and shop lease, and to paint the administration building, in preparation for the private flyers.

## NASAO Directors

Seasoned directors of the National Association of State Aviation officials elected at the recent St. Louis convention of the association, in addition to the officers announced in last week's AVIATION NEWS, are: Region 1, Arthur Tully, Jr., Massachusetts aviation director; Region 2, Asa Brewster, Arkansas aeronautical director; Region 3, Leslie L. Schroeder, Minnesota aeronautics commissioner; Region 4, Robert Adams, chief aeronautical director, Louisiana department of public works; Region 5, E. V. Pomeroy, Nebraska aeronautics director; Region 6, Joseph Dargatz, Utah aeronautics director; and Region 7, W. G. Ferguson, Montana aeronautics commissioner.

## Surplus Lightplanes All Sold in Canada

Canada has now sold all its approximately 500 surplus lightplanes, including Fleet Finches, de Havilland Tiger Moths, and Stinson 105's it is reported by War

Assets Corp. government surplus disposal board.

Only one type of light plane remains for later disposal, the Fairchild Cornell (PT-35A) which has not yet been declared surplus in quantity by the BCAF. Some of these are expected to be surplus shortly. About 50 Cornells have been sold.

Transport—Only one type of transport, the Cessna twin-engine Crane, now is available for surplus sale in Canada in numbers. This is the only one of the surplus planes hoversale for use in Canada, and 60 of these aircraft have been sold up to Sept. 30, 1945. For sale outside Canada, WAC has large quantities of Anson II and Anson IV twin-engine transports of which some 40 have been sold in the past primarily to Latin American countries.

Because the BCAF finds the Goodyear Norseman (UC-64) a good utility machine, and because the company is now building improved models for airline operation, the BCAF has not declared any of its Norseman as surplus. Only one has been sold as surplus by WAC.

All 10 Grumman Goose amphibians available for surplus have been sold by WAC, as have a few de Havilland Dagen. Fly 1946.

## Cincinnati Planning Airport Program

Lambert Field, at present the principal airport of Cincinnati, Ohio, would be designated as a major base for personal and business sized planes, and eight other smaller fields in the area would be designated to serve personal planes, under a program which has been authorized by the Cincinnati city council.

The plan provides for construction of a new major airport at a total cost of \$9,269,000 at Blue Ash, south of the city, which the engineering firm of Griffith & Vallet, Detroit consultants, estimates can be completed in 99 years. The engineering firm, as reported in Air Transport, expects that by 1960 there will be at least 1,800 private plane owners in the Cincinnati area. The large Boone County airport, just across the river in Kentucky, is recommended for use as a temporary commercial airport until the Blue Ash field can be developed, and as a secondary airport for both commercial and other types of planes, later.



## KEY CULVER SALES GROUP

Eight of the nine key dealers in the pattern sales organization of Culver Aircraft Corp., are shown above with other Culver personnel, at a recent sales meeting at Wichita where the Model V Culver two-place plane was introduced. Left to right, seated, Alton Walker, Hester, Calif.; E. G. Kibler and Harry H. Kibler, Los Angeles; J. W. Marshall, Beaumont, Texas; T. Boring Woodbury, Culver president; Kendall Rockswold and Regis Ott, Portland, Ore.; standing, Otto Edwards, Alexandria, La.; Gerald Francis, Lansing, Mich.; J. W. Baldwin and Gordon Dyer, Ft. Wayne, Ind.; Jason G. Sherrill, Richmond, Va.; R. R. Nadel, general sales manager, Verne M. Long, general counsel, W. H. Taylor, western sales manager, Robert C. Felt, chief engineer, M. Wagon, service manager, Paul L. Cronin, Augusta, Ga., dealer in set present for the picture.

engined transports. Surplus aircraft now left for which no market is anticipated are combat aircraft including the Hornet, F-4 Phantom II, F-105, F-106, F-107, F-108, F-111, F-117, F-119, F-120, F-121, F-122, F-123, F-124, F-125, F-126, F-127, F-128, F-129, F-130, F-131, F-132, F-133, F-134, F-135, F-136, F-137, F-138, F-139, F-140, F-141, F-142, F-143, F-144, F-145, F-146, F-147, F-148, F-149, F-150, F-151, F-152, F-153, F-154, F-155, F-156, F-157, F-158, F-159, F-160, F-161, F-162, F-163, F-164, F-165, F-166, F-167, F-168, F-169, F-170, F-171, F-172, F-173, F-174, F-175, F-176, F-177, F-178, F-179, F-180, F-181, F-182, F-183, F-184, F-185, F-186, F-187, F-188, F-189, F-190, F-191, F-192, F-193, F-194, F-195, F-196, F-197, F-198, F-199, F-200, F-201, F-202, F-203, F-204, F-205, F-206, F-207, F-208, F-209, F-210, F-211, F-212, F-213, F-214, F-215, F-216, F-217, F-218, F-219, F-220, F-221, F-222, F-223, F-224, F-225, F-226, F-227, F-228, F-229, F-230, F-231, F-232, F-233, F-234, F-235, F-236, F-237, F-238, F-239, F-240, F-241, F-242, F-243, F-244, F-245, F-246, F-247, F-248, F-249, F-250, F-251, F-252, F-253, F-254, F-255, F-256, F-257, F-258, F-259, F-260, F-261, F-262, F-263, F-264, F-265, F-266, F-267, F-268, F-269, F-270, F-271, F-272, F-273, F-274, F-275, F-276, F-277, F-278, F-279, F-280, F-281, F-282, F-283, F-284, F-285, F-286, F-287, F-288, F-289, F-290, F-291, F-292, F-293, F-294, F-295, F-296, F-297, F-298, F-299, F-300, F-301, F-302, F-303, F-304, F-305, F-306, F-307, F-308, F-309, F-310, F-311, F-312, F-313, F-314, F-315, F-316, F-317, F-318, F-319, F-320, F-321, F-322, F-323, F-324, F-325, F-326, F-327, F-328, F-329, F-330, F-331, F-332, F-333, F-334, F-335, F-336, F-337, F-338, F-339, F-340, F-341, F-342, F-343, F-344, F-345, F-346, F-347, F-348, F-349, F-350, F-351, F-352, F-353, F-354, F-355, F-356, F-357, F-358, F-359, F-360, F-361, F-362, F-363, F-364, F-365, F-366, F-367, F-368, F-369, F-370, F-371, F-372, F-373, F-374, F-375, F-376, F-377, F-378, F-379, F-380, F-381, F-382, F-383, F-384, F-385, F-386, F-387, F-388, F-389, F-390, F-391, F-392, F-393, F-394, F-395, F-396, F-397, F-398, F-399, F-400, F-401, F-402, F-403, F-404, F-405, F-406, F-407, F-408, F-409, F-410, F-411, F-412, F-413, F-414, F-415, F-416, F-417, F-418, F-419, F-420, F-421, F-422, F-423, F-424, F-425, F-426, F-427, F-428, F-429, F-430, F-431, F-432, F-433, F-434, F-435, F-436, F-437, F-438, F-439, F-440, F-441, F-442, F-443, F-444, F-445, F-446, F-447, F-448, F-449, F-450, F-451, F-452, F-453, F-454, F-455, F-456, F-457, F-458, F-459, F-460, F-461, F-462, F-463, F-464, F-465, F-466, F-467, F-468, F-469, F-470, F-471, F-472, F-473, F-474, F-475, F-476, F-477, F-478, F-479, F-480, F-481, F-482, F-483, F-484, F-485, F-486, F-487, F-488, F-489, F-490, F-491, F-492, F-493, F-494, F-495, F-496, F-497, F-498, F-499, F-500, F-501, F-502, F-503, F-504, F-505, F-506, F-507, F-508, F-509, F-510, F-511, F-512, F-513, F-514, F-515, F-516, F-517, F-518, F-519, F-520, F-521, F-522, F-523, F-524, F-525, F-526, F-527, F-528, F-529, F-530, F-531, F-532, F-533, F-534, F-535, F-536, F-537, F-538, F-539, F-540, F-541, F-542, F-543, F-544, F-545, F-546, F-547, F-548, F-549, F-550, F-551, F-552, F-553, F-554, F-555, F-556, F-557, F-558, F-559, F-560, F-561, F-562, F-563, F-564, F-565, F-566, F-567, F-568, F-569, F-570, F-571, F-572, F-573, F-574, F-575, F-576, F-577, F-578, F-579, F-580, F-581, F-582, F-583, F-584, F-585, F-586, F-587, F-588, F-589, F-590, F-591, F-592, F-593, F-594, F-595, F-596, F-597, F-598, F-599, F-600, F-601, F-602, F-603, F-604, F-605, F-606, F-607, F-608, F-609, F-610, F-611, F-612, F-613, F-614, F-615, F-616, F-617, F-618, F-619, F-620, F-621, F-622, F-623, F-624, F-625, F-626, F-627, F-628, F-629, F-630, F-631, F-632, F-633, F-634, F-635, F-636, F-637, F-638, F-639, F-640, F-641, F-642, F-643, F-644, F-645, F-646, F-647, F-648, F-649, F-650, F-651, F-652, F-653, F-654, F-655, F-656, F-657, F-658, F-659, F-660, F-661, F-662, F-663, F-664, F-665, F-666, F-667, F-668, F-669, F-670, F-671, F-672, F-673, F-674, F-675, F-676, F-677, F-678, F-679, F-680, F-681, F-682, F-683, F-684, F-685, F-686, F-687, F-688, F-689, F-690, F-691, F-692, F-693, F-694, F-695, F-696, F-697, F-698, F-699, F-700, F-701, F-702, F-703, F-704, F-705, F-706, F-707, F-708, F-709, F-710, F-711, F-712, F-713, F-714, F-715, F-716, F-717, F-718, F-719, F-720, F-721, F-722, F-723, F-724, F-725, F-726, F-727, F-728, F-729, F-730, F-731, F-732, F-733, F-734, F-735, F-736, F-737, F-738, F-739, F-740, F-741, F-742, F-743, F-744, F-745, F-746, F-747, F-748, F-749, F-750, F-751, F-752, F-753, F-754, F-755, F-756, F-757, F-758, F-759, F-760, F-761, F-762, F-763, F-764, F-765, F-766, F-767, F-768, F-769, F-770, F-771, F-772, F-773, F-774, F-775, F-776, F-777, F-778, F-779, F-780, F-781, F-782, F-783, F-784, F-785, F-786, F-787, F-788, F-789, F-7

### Denver Store Sells 8 *Erconbes* in Week

Three of them, two ranchers, a frozen foods manufacturer, a department store manager, a physician and a housewife purchased post-war Stropes, the first ones they went on sale at downtown department store of J. C. Penney Co., Denver, in cooperation with nearby Sky Ranch Airport.

Delivery was proceesed within approximately three months to the customers who paid \$150 down, the balance due on delivery. Incidentally the Colorado customers pay \$3108.58 for their Escapes, including a two percent sales tax.

► **Thruway**—Don Reed, Delta, Colo.—200 miles from Denver, plans to commute between his home and Denver, to carry on his frozen foods business. He has been flying by charter plane, but is taking flying lessons in preparation for delivery of his own plane. He can make the trip in an hour and 40 minutes by plane as against 8 hours by auto and 14 hours by train.

One of the oilmen purchasers ordered his plane equipped with skis for winter flying to remote oil fields in Wyoming. The oilmen said they expected to be able to carry small replacement parts into the fields saving considerable time over surface shipments.

The Denver store is displaying a new Erosape on its second floor in a department known as the Women's Sky Ranch, where outdoor clothing and related merchandise is also exhibited.

## Size Plane 'Rental'

A plan for emergency use of state-owned aircraft by Michigan departmental officials has been approved by the Michigan Administrative Board.

Departments using the two Army surplus twin-engine Cessnas for official travel purposes will be charged approximately \$38 per hour by the Michigan Aeronautics Commission. Use will be limited to emergencies.

## Deaf Students Solo

Three flight students at Long Field Airport, Ghana, who recently soloed on the same day, discussed their preliminary arrangements on their flight. Two of them are entirely deaf, the third has his hearing badly impaired.

Recently introduced CAA physical requirements made it possible for all three—William Wilens, 34, Michael Foran, 32, and Peter Petrides, 35—to obtain waivers and student pilot certificates. Wilens sailed after only five hours of instruction.

**Y-Axis Average** — Earl Packer, their instructor, said he teased the rudiments of the dead sign language handed while instructing them, and used it to converse with them. He described their "feel" of the controls, and their attitude at learning to fly, as well above average. Because of their handicap they must take a special flight test with a CAA inspector before receiving private pilot's licenses.

## Private Hangars Built By Pittsburgh Firm

Greiner Aviation Co., Pittsburgh, is building private plane hangars of concrete block, each building 420 by 45 ft. The buildings, assembled on location, have solid windows, long-span roof joists, built-up roofing and aluminum-faced lift doors. The individual hangars taper in width from 44 to 40 feet, and a 22-foot lean-to for engine overhauls is attached.

The company already has constructed 20 of the individual



**"Ercoupe" In Denver Store:** Series Ercoupes sold in the first day's business at the J. C. Penney Co. downtown store in Denver, was the record set up after the placing of a new Ercoupe on the second floor of the store in the Women's Sky Ranch department. The store is handling sales in cooperation with Sky Ranch Airport, nearby prairie field.

hangars at Pittsburgh's City-County Airport, and plans to build 40 more at the Johnstown, Penna. Municipal Airport and others at Cumberland, Md.

► **Decreased**—W. J. Graham, president, reports that three applicants a day for hangar rental space are being turned down at the Pittsburgh field because of lack of hangar space.

The Graham company also has designed another type barge for maintenance work, 288 by 64 ft.

Howard Reconvert  
Hawthorne Field

Hawthorne Field, Grangeburg, S. C., last civilian flight school for AAF cadets, has been converted into a commercial aircraft sales and repair base by Beverly Howard, president of Hawthorne Flying Service. Howard has arranged with RJC for lease of the flight line buildings at the field, including two steel hangars, a three-story operations building, a pilot

The field will be headquarters for Howard's chain of airport operations at Jannings Airport, Grangefield, Greensboro - High Point, Fayetteville and Rocky Mount, N. C., Albany, Ga., and the affiliated Air Services, Inc., at Washington National Airport.

**Shops**—One of the hangars will be equipped for complete overhaul of all types of planes while the other will be used for storage of new Piper and Beechcraft planes for which Hawthorne is a distributor. Hangar lease-fee will be used for additional storage and shop space. The pilots' building will be converted into an office building with additional offices and a restaurant in the operations building.



## ALL IN THE DAY'S WORK

A helicopter can easily hover low enough for pilots and passengers to talk with people on the ground nearby. The Kaibab XR-1 helicopter, shown above, "stood still in the air" by the hour, at only one foot altitude, during its test period. When all was ready, returning cables were loosened and its cross-country flying career began.

The XR-8 can fly forward, backward or sideways. It can rise or descend vertically, permitting take-offs and landings in any space large enough for safe clearance of its own blades.

Kellogg has been active in the design of rotary wing aircraft—helicopters and autogiros—for over 16 years. More advanced models than the XR-8 are

on Kellert drawingboards and in Kellert workshops today.

The final word in helicopter design will not be written for some time to come. Many engineering problems must be solved before helicopters are brought into personal daily use. Progress already achieved, however, more than justifies the man-hours that must still be spent by Koller and other organizations active in this field. Their objective is to make helicopters available for emergency travel and transport jobs, in areas and under conditions where no other air, land or water craft can operate.

Kellogg Aircraft Corp., Upper Darby (Philadel-  
phia), Pennsylvania.

**KELLETT**

## PRODUCTION

### Aircraft Producers Try to Bolster Badly Depleted Engineering Staffs

Many plants unable to meet projected schedules on experimental and new-design work; several are conducting nationwide recruiting campaigns; aid sought on draft problem

Doors of at least three major West Coast aircraft factories, and several on the East Coast, are wide open today to engineers.

In particular, those manufacturers now developing or planning new transports have found staffs heavily depleted by the draft and end-of-the-war turnover, wholly unable to handle the commercial experimental and new-design engineering that could be started with the end of the war.

On Watch—Engineering personnel managers are scouting universities, reaching every pipeline of news of engineering layoffs by other industries, pouring on the "Position Wanted" ads in trade magazines, investigating the offerings of Federal and private employment agencies, and even hiring civil and mechanical engineers for training as aircraft engineers.

Within the past two weeks, the aviation industry has turned hopefully to Congress with support for efforts both to obtain Selective Service exemption in the drafting of engineers, and to win early release from the armed forces of qualified persons not assigned to military engineering duties.

Results—Despite the strenuous efforts to alleviate the situation, the results are less than might be expected. Clayton Laveen, manager of engineering division employment for the Douglas Aircraft Co., says his company would hire 300 qualified engineers today if they were available. Douglas, in spite of intensive, nation-wide recruitment, is getting no more than 30 engineers a month. The company is barely breaking even in balancing engineering employment against turnover and draft losses.

While manufacturers are scrambling for aerodynamicists and stress analysts, their chief concern seems to be the strengthening of their supply of major and minor layout draftsmen—top draftsmen

capable of carrying a project through with a strong display of initiative and responsibility.

Hampers—West Coast engineering job alerts report that their recruiting is hampered seriously at the present time by the widespread conviction that the aviation industry is a "war baby" offering little job security in the future.

Additionally, they have run into strong competition from East Coast plants, which are offering substantially higher salaries. Eastern plants reportedly have offered engineers from \$75 to \$400 a month for positions, which pay \$250 in West Coast plants.

Results—To some degree, aircraft manufacturers are experiencing similar difficulties in recruiting their production staffs. Major West Coast plants are engaged in newspaper and radio advertising for production workers, and those which had war-time layoffs are sending out recall telegrams to thousands of workers who will be needed to meet assembly

lines opening soon after the first of the year. Douglas is getting a 30 percent response to recall telegrams.

Lockheed is in the midst of the most aggressive production worker recruiting program. It is spending more than \$1,000 a week in advertising over six Los Angeles radio stations and in Southern California newspapers. Post V-Day registrations of close to 7,000 workers were a critical loss to Lockheed because the company was needed to swing immediately into large-scale production on Constellation, and because its P-30 jet fighter production was accelerating, despite the long-range cutback of P-50 orders.

Gaining—Benefits of the Lockheed campaign are intangible. While turnover still is heavy, with total employment standing at 20,603, new employment and re-employment is bringing the company between 3,500 and 4,500 workers a month and soon will meet and exceed losses.

It is estimated that newspaper advertising is accounting for 25 percent of current production worker applicants at Lockheed, and radio advertising, through 300 broadcasts per week, 20 percent. About 50 percent of applicants are former Lockheed employees, listed as "volunteer returns." The remaining two percent are returning war veterans and new workers attracted by word-of-mouth. Lockheed's returning war veterans are being absorbed in increasing numbers. In August, 30 were processed; in September, 62; and in October, 283.

### Flying Wing Drawbacks Seen

Considerable engineering opinion is developing that the flying wing is not compatible with high-speed design theories.

At high speed the whole idea is to have the least possible frontal area—of nothing being of much less importance with respect to solid drag than area over which mixed air flow can operate to develop lift. Inevitably, these views lead to low aspect ratios.

Twelve Built—Twelve experimental "Flying Wing" aircraft have been built and flown by Northrop Aircraft since 1940 as a prelude to the company's multi-engine flying wing bomber (XB-35) now nearing completion. While there has been little serious concern about the flying wing development, the annual stock-

holders report commented that the flying wing posed a "reversing" the stage where production should contribute to savings during the company fiscal year.

The report also disclosed the number of each aircraft which have been built.

Not in the Northrop report was the fact that it was an experimental flying wing which is used to have started the Nazi government to give isolated but intense support to the Horten brothers in their flying wing experiments. A picture of a Northrop wing in the Swiss magazine *Peter Air* is credited with having convinced the Nazis that the flying wing was a design suitable for enlargement into a high speed jet bomber.



**National**  
SCREW & MFG. CO.  
PRODUCTS

**THE NATIONAL SCREW & MFG. CO., CLEVELAND 4, O.**

**CAN'T FIND ANY  
AN-6-36  
BOLTS?**

**National Screw  
will have them**

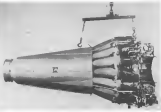


During the war we have produced the most complete line of aircraft fasteners made by one manufacturer, and we are going to stay in that business.

For some time to come, the great bulk of aircraft fasteners used will be supplied out of surplus, but there are bound to be shortages of certain parts. We shall be prepared to supply these.

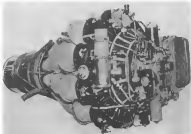
In addition to standard AN and NAS parts, National Aviation Products include many special parts, such as carburetor studs, motor mounting bolts, stainless steel instrument screws, dome nuts and many others.

National was officially recognized by the Air Forces for its "Quality Control." We shall continue to maintain the high standards that have made us a principal source for aircraft fasteners.



## BRITISH JET ENGINES

Newest and most powerful British jet engine on which details have been released is the de Havilland-designed Goblin (above) which powers that company's Vampire. With a 3,000-lb thrust, roughly equivalent to 3,000 hp at 375 r.p.m., the Goblin gives the Vampire a level flight speed of 548 mph with full military load. The Rolls Royce Derwent jet engine (right) is the type which powers the new jet Glanville Meteor which recently exceeded the world's speed record. Rolls Royce built the original Whittle jet engine.



## New Bell Jet Fighter Exceeds 500 Mph.

New details of Bell Aircraft's latest jet fighter craft (AVIATION NEWS, Oct. 30) have been disclosed, including the fact that the plane designated the XP-83, has demonstrated a speed in excess of 500 miles per hour and, according to Bell engineers, has aerodynamic characteristics suitable for speeds in the same range.

The plane (photo on Page Three) is an experimental model and has not been placed in production. But it is capable of flying to extremely high altitudes and one of the traits of the early jet planes—shortness of range—has been eliminated.

**Specifications**—The XP-83 was designed and developed by Bell in cooperation with the Air Technical Service Command. It is a medium-wing monoplane of semi-monocoque construction with a 38-ft wingspan. The fuselage is 44 ft, 10 inches long and is of all metal construction. The tail, upward to clear the jet blasts of the General Electric J-40 engines, is approxi-

mately 13 ft., 3 inches high at the top of the fin. The plane has a tricycle landing gear.

Weight of the plane empty is nearly 15,500 pounds while with its full fuel load it weighs more than 25,000 pounds.

► The XP-83 looks somewhat like its predecessor, the P-59A Airacomet, first jet-propelled plane in the United States, with its engine mounted under the wings.

gling details. It is understood the company will strive for foreign markets, including United States airlines. Retooling for the production of the Aero Trader is expected to start soon. In addition to the Trader the company probably will build jet engines and experimental military aircraft.

## Data Available

A research room to make available some of the vast store of statistics on industry gathered during the war by the War Production Board is being established for a short period by WPB's successor, Civilian Production Administration. The service will function from Nov. 10 through Dec. 20 in the Social Security Building, Washington, D. C.

Information will not cover any specific firms, but will be over-all summative.

## British Firm Takes Over Toronto Aircraft Plant

A V Roe Canada Ltd., subsidiary of Hawker-Siddeley Aircraft of England, has taken over operation of the Victory Aircraft Ltd. plant at Toronto following completion of details of the sale of the Canadian government-owned factory to British interests.

Sir Roy Deane, managing director, and E. T. Skye, an executive of the British company, have been in Ottawa and Toronto con-



Convenient in-board lounge of the Stratocruiser

ROY VICTOR JONES

## London—660 minutes by Stratocruiser

Some millions of Americans have recently made new friends in countries all around the globe. Many of these friendships will continue to flourish. For there are no longer any "far away places." The Boeing Stratocruiser will increase in hours the distance to any spot on earth.

You would expect such an airplane from Boeing—world's leading builder of four engine aircraft, pioneer in supercharged planes for over-weather, instrument flight, and comfort of the night. And the Boeing Stratocruiser will not disappoint you. It is what you want and the aircraft need.

The Stratocruiser brings a new, unprecedented standard of performance, operating efficiency and reliability. For it makes full use of the aerodynamic, structural and mechanical advancements

developed by Boeing for the bombers and transports during the war. It has a maximum cruising speed of 490 miles per hour and provides exceptionally low operating costs over a wide range of flight altitudes—from 500 to more than 30,000 feet.

Most remarkable of all large aircraft, an spacious double-deck design and big payload capacity. In the Stratocruiser, for almost every type of medium or long range operation. In the standard, domestic version, 48 passengers may be carried—by no other single-deck or large, comfortable seating there and 54 in luxurious seats in the lounge—with ample baggage and cargo capacity. As a de luxe transoceanic plane, the Stratocruiser will accommodate 75 passengers on daylight trips or at night—provide 35 unusually spacious berths plus 15 additional seats—together with

baggage and cargo. As a transoceanic transport, it can seat 114 passengers, and in all-cargo operation an 180-ton capacity and any loading programs make it outstandingly efficient.

For any of these kinds of service, the Boeing Stratocruiser offers the lowest direct operating cost per mile achieved by any existing aircraft. To meet the need for all types of flights and make a line operation, either Boeing transports are also on the way.

The extraordinary performance of the Stratocruiser stems directly from Boeing principles of research, design, engineering and manufacture. You too can buy that airplane "Built by Boeing" is built to last.

REQUIREMENT OF THE U.S. GOVERNMENT • THE FLYING FRANCHISE • THE NEW STRATOCRUISER  
THE SHORTEST TRAM • THE STRATOLINER • PAN AMERICAN CLIPPING

**BOEING**

# Measuring SOUND

## Why Western Electric equipment leads the way!

1. Western Electric products are designed by Bell Telephone Laboratories—the world's largest organization devoted exclusively to research and development in all phases of electrical communication.

2. Since 1859, Western Electric has been the leading maker of communication apparatus. During the war this company was the nation's largest producer of electronic and communication equipment.

3. The outstanding quality of Western Electric equipment has been proved daily as loud as sea, in the air, under every extreme of climate. No other company supplied so much equipment of so many different kinds for military communication.

In flight room or briefly disconnected, a Western Electric sound analyzer is used to measure sound characteristics of the phone and locate major sound disturbances.

## Western Electric

Today's world is a world of sound. How different it would be without the telephone, radio, public address systems, aids for the hard of hearing, talking pictures!

For many years, Bell Telephone Laboratories and Western Electric—working closely as research and manufacturing companies—have led the way in building this world of sound.

In the course of their sound-transmission work, these companies

# or spreading it around

A powerful Western Electric public address system spreads sound evenly throughout New York's huge Madison Square Garden which seats more than 17,000 people.

## equipment leads the way!

have the developed scientifically accurate instruments for measuring and analyzing sound and vibration. These instruments have many important uses today—will have still more tomorrow.

Through their lifetime of pioneering in this field, Bell Labs and Western Electric have gained a unique knowledge of sound and how to handle it. Count on them for the finest equipment for measuring sound or spreading it around!



Buy all the Victory Bonds you can  
... and keep all you buy!

### Western Electric has specialized



AM • BROADCASTING • FM



TELEVISION



AVIATION RADIO



MARINE RADIO

### knowledge in all of these fields



MOBILE RADIO



HEARING AIDS



SOUND MOTION PICTURES



VACUUM TUBES



#### BRITISH JET PRODUCTION:

An indication of the extent of Great Britain's production of jet fighting planes is this view of the Rolls Royce factory producing the Derwent that powers the Gloster Meteor.

### Fairchild Division Sets New Products

Duramold Division of Fairchild Engine and Airplane Corp. has accepted substantial contracts for the manufacture of small boats designed for sportmen, and cabinets for several of the country's large producers of radio equipment.

T. Kelley Pierce, general manager of the division, said satisfactory negotiations are also under way in the automotive trucking field which may lead to the manufacture, by the Duramold division, of unique lightweight trailer

bodies for commercial transport purposes.

**Trend Markers**—While several aircraft companies expressed their intention of remaining strictly in the aeronautical field, a number of others, of which Fairchild is typical, are looking outside the aviation industry for new products to produce as a part of their general nonexclusive policy.

Pierce explained that since the beginning of the war production of various items for the Army Air Forces has absorbed Duramold's full capacity and added that while the division has no intention of discontinuing their research and

application of Duramold to the aeronautical field, the cancellation of military orders has made it possible for them to accept commercial business for production in other fields as well as for the manufacture of peacetime products.

One of Duramold's annual orders in the marine field is for lightweight drawings of molded plastic plywood construction for Souma-takeh Boats, Inc., of Montauk, N. Y. With a hull made in one piece by Duramold process, the eight-foot dinghy can carry a load well over 1,000 pounds. In addition, a substantial volume of orders for small radio cabinets and for several types of large consoles have been received from Emerson Radio and Television Corp. and Magnetic Radio and Television Corp.

### Douglas Backlog At Quarter-Billion

Douglas Aircraft enters the last quarter of its 1945 fiscal year with a current military and commercial backlog of \$384,000,000 despite war and termination and those that followed.

The company's third-quarter statement disclosed that Douglas sales and billings for the nine-month period were \$642,514,939 and net income, after provision of \$16,795,594 for estimated taxes and \$7,546,000 for contingencies, was \$4,921,000.

**Volume Profit**—On a sales volume basis, however, the company's profit was less than eight-tenths of 1 percent. Ralph V. Egan, vice-president, comptroller, said 66 percent of the sales volume was produced under cost-plus-fixed-fee governmental contracts, now rapidly nearing completion.

Net working capital at the end of the third quarter was \$84,677,893. Of this, approximately \$3,000,895 resulted from the changed status of tax refund credits and income profit tax liabilities. The report pointed out that declaration in Oct. 17 of the annual dividend of \$4 per share on the 666,000 shares of common stock outstanding subsequently has reduced working capital by \$2,699,895.

Current assets at the end of the third quarter were \$83,460,899 and the current liabilities were \$28,975,907.

**Backlog Bulk**—Major portion of the company's backlog still consists of military orders.

## 46 AVIATION FEATURES IN MECHANIX ILLUSTRATED!

Mechanix Illustrated has published 46 aviation features in just the last six months. 134 pages—with many full-color photographs never printed before—have given the readers of *Mechanix Illustrated* facts and fun about flying straight from big names in the business.

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read the magazine that knows best how to give it to them. *Mechanix Illustrated* is an excellent spot for your selling take-off. Tell our thousands of enthusiastic readers about your planes and your plans. They need what you can tell 'em to complete their preparation for tomorrow's flying. For our readers, and for your advertising program, there's no blind flying in *Mechanix Illustrated*.

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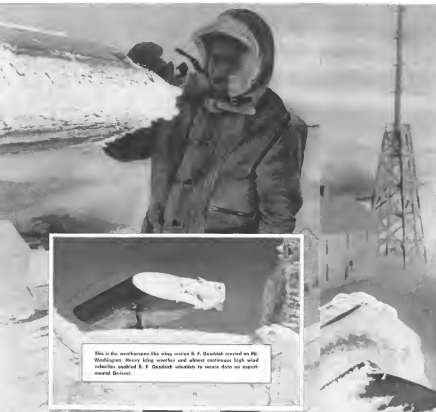
*Mechanix Illustrated* never forgets the practical, usable side in its editorial features. Articles for all ages of fellowes who are up-in-the-air with their thoughts are crammed into nearly every page of every issue. The September, 1945, article on "Servicing Model Engines" (shown left) appeals especially to fledglings.

The Magazine that Makes  
Plane Facts Exciting





# "Flying" in ice without leaving the ground...



## TESTING ON A MOUNTAIN TOP HELPS B. F. GOODRICH BUILD BETTER DE-ICERS

**D**E-ICERS have been tested in actual flight through icing conditions; they were tested in the B. F. Goodrich wind tunnel, for years the only refrigerated tunnel in this country. Through all these tests, improvements in design were made in new types of De-Icer equipment.

The scientists at B. F. Goodrich, however, felt a need for a natural observatory for continuing their experiments. They wanted to know the answer to many questions on the properties of ice, and other data which could be more easily observed in an outdoor laboratory.

So B. F. Goodrich looked for a "natural" laboratory . . . and found it on the 6,288-ft. summit of Mt. Washington. Winds up to 231 m.p.h.! Icing conditions most of the winter. Besides that

a U. S. Weather Bureau, staffed with expert observers was right at hand with exact information as to temperature, wind velocity, icing rate, density and type.

B. F. Goodrich erected a wing section (mounted like a weather-vane so it always faced the wind) and installed experimental De-Icer models. Almost constant heavy icing conditions gave physicists an opportunity to accumulate accurate data without leaving the ground.

This is another example of the constant research that goes on . . . the constant fight B. F. Goodrich is waging against airplane icing. It's another reason why B. F. Goodrich De-Icers are the best ice protection devices ever developed for aircraft. The B. F. Goodrich Company, Aeronautical Division, Akron, Ohio.



This is the weather-vane like wing section B. F. Goodrich erected on Mt. Washington. Heavy icing weather and almost continuous high wind velocities enabled B. F. Goodrich scientists to secure data on experimental De-Icers.

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## PERSONNEL

### Maj. R. S. Fogg Appointed To Edo Sales Post

**Maj. Robert S. Fogg** (photo) has joined Edo Aircraft Corp., College Point, L. I., and will be in charge of a commercial foot sales post serving as president of the aviation cadet board in New England while on active duty and later in the major's general staff.

Mr. Fogg's department, Air Service Command, and more recently as chief, maintenance branch, Office of Air and Safety, Headquarters, AAF.

**George E. Ridd**, retired Pan American Airways vice-president, has returned to Mexico City in a special assignment to Compañia Mexicana de Aviación. He joined Pan Am as vice-president in 1929 and began his aviation career in Mexico.

**J. S. Barlow**, former Boeing test pilot, has been appointed northwest territory aviation representative for the United Oil Co. of California.

**Col. Thomas A. Murphy**, formerly aviation manager for Delta Airways, Detroit, and assistant to the president of United Aircraft, has been named aviation industry manager for Reynolds Metals Co.

**Wesley B. Warren** has been appointed employment manager for Delta Air Lines. He has been in the Navy for the past four years.

**Lowis A. Rodert**, former American expert in anti-aircraft systems for aircraft, has joined the research staff of Brewster-Warner Corp.'s newer plant at Indianapolis. Rodert has been at Ames Aeronautical Laboratory of the National Advisory Committee for Aeronautics at Moffett Field, where he was section head of flight engineering. Previously he had been at NACA's Langley Field.

**William B. Newhall** has been appointed treasurer of Macmillan-McIntosh Corp. He has been acting treasurer of the organization.

**Vance West** has resigned from Pratt & Whitney Aircraft's Washington office to join his father's law firm. He has been Washington representative for the engine company for the past four years.

**Ralph E. Middleton**, a vice-president of Avcon Manufacturing Corp., has been named general manager of the corporation's hydraulic division. He has been chief engineer since 1941. Prior to his association with Avcon, Middleton was connected with Curtiss-Wright Corp. as staff engineer on landing gear design. **Ernest D. Haffick**, Washington area representative for the past two years for Avcon, has been named to fill a vacancy on the corporation's board of directors and will be moved to the company's headquarters in Kansas City as administrative assistant to A. E. Welch, executive vice-president.

**Allen F. Bonasue** of United Air Lines and formerly commander of the Navy, has been appointed director of the Institute of Aeronautics at the University of Illinois. The Institute is a newly created agency of the University and will administer all phases of the institution's aeronautical interests. Bonasue has been a member of the University of Illinois Advisory Board on Aeronautics since it was organized.

**Robert F. Berley** (photo) has been named director of aeronautical research for Edgett Corp., succeeding S. D. Heron, who is retiring. Berley is a civilian engineer with extensive experience in aeronautical research but who will remain with Edgett as a special consultant. Berley has been a civilian engineer with the engineering division of the Army Air Forces at Wright Field.

**Donette Rylander** has been named assistant secretary of Continental Air Lines, second woman to hold an executive position in the company.

**Capt. George B. Lohman** has been appointed check pilot of the Canadian government Trans-Atlantic Air Service at Dorval airport, Montreal.

**Thomas H. Jay** has been named personal director for Continental Air Lines. He was formerly with Pan American Airways in the industrial relations department.

**Maj. John G. Maxwell** has been named district traffic manager for Trans-Canada Air Lines at Winnipeg, succeeding **M. B. Marling**, recently appointed to the company's general traffic department.



### SAFETY CHIEF HONORED

**Gen. R. H. Arnold**, AAF chief, congratulates **Col. George Price**, director of the AAF Office of Flying Safety, after receiving the Legion of Merit for his work.

### Grever Learning Resigns From Government Service

**Grever Learning** has resigned from the U. S. Government where he served in various capacities including aviation consultant to chairman of the War Production Board and special consultant to the Navy. Learning will remain as a consultant to the National Advisory Committee for Aeronautics, and will be active in advising and consulting work in the industry. He will have headquarters at the Mayflower Hotel in Washington.

Learning's services during the war were used by the War Relocation Authority and Exchange Commission, War Department, Civil Aeronautics Board and RFC.

### Gen. Allard Decorated By British For Work

**Reg. Gen. John S. Allard**, a vice-president at Curtiss-Wright Corp., before entering the Army in 1941, has been awarded the Order of the British Empire by British Ambassador Lord Halifax, for his outstanding service as deputy chief of staff and as chief of staff of the Eighth Air Force. Gen. Allard also has received the French Legion of Honor and the Croix de Guerre with Palm. He plans to return to Curtiss-Wright after his discharge from the Army sometime this month.

**Lois M. Marling**, assistant district traffic manager of United Air Lines, has been elected president of Airline Terminal Inc. **James F. Farrell** and **W. S. Allen** were elected vice-president and secretary-treasurer, respectively. The company owns and operates the terminal building in New York.

what do the airlines buy? how much do they buy yearly?  
who does the buying? how did the war affect development of air transport? what's happening today? what of the next 5-10 years? what are future traffic potentials?  
what of air freight? of first-class mail? . . . of U.S.-International traffic? . . . of feeder line development?  
most important to you, what are the sales potentials for your product in this rapidly-developing transportation market?

## new book answers your questions about the air transport market

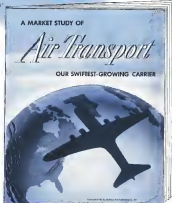
Here, for the first time, is a comprehensive and thoroughly informative picture of a great new transportation market for U.S. business. This 32-page report has been designed specifically to furnish you with basic working information for an accurate evaluation of dollar volume potentials and sound sales development in the air transport market.

It's rich with sales information, facts, data, charts, maps, tables—but not stuffy. It's fast-moving, interesting reading, with plenty of airline action shots. This right down to dollar figures. Examples: how the average transport plane in one year requires \$450 in exhaust valves, \$100 in paint, \$150 in spark plugs, \$250 in upholstery and carpeting, etc.—how one airline spends yearly over \$2,000,000 for parts and supplies alone.

Explains engineering, maintenance and overhead practices, charts buying influences in the airlines and the airports, charts the progress of the industry post-war, during the war and presents a sound, realistic appraisal of the immediate future.

### SEEKING NEW MARKETS NOW?

If you manufacture any of the thousands of products used in air transport, examine closely this relatively undeveloped market, still rich with opportunity. The exposure that you need today is only the beginning.



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## CAB Decision on AA-MCA Merger Will Establish Important Precedent

Considerable speculation surrounds American Airlines' proposal to acquire control of Mid-Continent Airlines by merger. Until members of the Civil Aeronautics Board, after conducting a prehearing conference, have scheduled hearings to start in the case next Jan. 26. The ultimate board decision will determine the course of pending mergers in the air transport industry.

American proposes to issue its stock for that of Mid-Continent at a 1-4 ratio. With American's stock selling around \$90 per share, a value of about \$23.50 per share is placed for Mid-Continent.

► **Book Value**—At last reports, the book value of Mid-Continent aggregated around \$5 per share. This, in itself, is not unusual as in recent years there has been little relation between airline book values and market prices. The growth aspects of the industry have such outstanding market appeal that rights are set for optimistic future earnings prospects.

In effect, American proposes to pay about \$2,752,000 for a company having a book value of less than \$1,200,000. The sale equity value of Mid-Continent consists of 189,299 shares of common stock.

As with most carriers, Mid-Continent's early financial road was far from smooth. A block of 20,000 shares of common stock were offered in February, 1945, at \$4 per share. Later that year, in October, an additional 100,000 shares were marketed at \$5 per share.

► **Earnings**—Earnings for Mid-Continent for the year ended December 31, 1944, were equivalent to 24 cents a share. Results for this year are running slightly ahead of 1944.

It is interesting to observe that Continental Airlines, a carrier similar in many respects to Mid-Continent, has an approximate market value of \$19 per share. This company shares a book value of around \$5 per share. Further, earnings of 30 cents per share were reported for 1944, with about \$1 additional secured for the seven

months ended July 31, 1945.

► **Development**—It is possible that if associated with the American Airlines system, Mid-Continent may be able to develop considerable earning power as part of an integrated operation. Among other benefits, it is claimed that lowered operating costs, further fare reductions and increased frequencies would result.

It has been known for some time in investment circles that control of Mid-Continent was for sale. Various deals were in the rumor mill but failed to materialize. A merger was previously proposed with Northwest Airlines in December, 1942. This combination never reached the CAB for decision as both carriers subsequently decided to call the whole thing off.

► **Control**—Latest reports show that the largest stockholder of Mid-Continent is Thomas F. Ryan, III, owning 95,997 shares or 24.8 percent of the total. In addition, an aggregate of 31,248 shares are owned by Mr. Ryan's three children. Inco & Co. and Zinc & Co. of New York, presumably nominees for investment interests are reported as owning 31,046 and 31,972 shares, respectively. Another examinee, Rens & Co. owns 4,668 shares. Other holders include Milton McGrovey, director and identified with Harza, Upjohn & Co., 1,065 shares. Another director, W. W. Haves owns 3,000 shares and J. W. Miller, president, 675 shares. Mid-Continent represents that owners of 30.15 percent of its stock are initially in favor of this merger.

Under Section 933 of the Civil Aeronautics Act of 1938, the Board must find that this merger will be in the public interest and "shall not approve any acquisition of control which would result in creating a monopoly and thereby restrain competition or jeopardize another carrier not a party to the acquisition of control."

► **No Precedent**—Previous consolidations and mergers approved by the Board were surrounded with

special factors which do not leave any clear-cut precedent.

Considerable significance may be found in the decision of the Board's predecessor, the Civil Aeronautics Authority, in its June, 1940, action in denying United's application to acquire Western Air Lines by merger. The Authority declared the consolidation would give United direct access to the Pacific Coast area for the origination of transcontinental traffic.

► **Effect**—It was asserted that the size and control of United in this large area would adversely affect the existing competitive opportunities for western business. In other words, it was felt that American, TWA and Northwest might be placed at a serious disadvantage.

In the present case, United, Northwest, Braniff and others have expressed vigorous objection to the proposed combine and promise to be active intervenors.

► **Similarity**—Some similarity may be found in the Western acquisition of Inland Airlines, approved by the Board early last year. Western paid \$2.50 per share of Inland's stock. This was better than double the book value. Another case involved Board approval of United Air Lines' 75 percent purchase of LAMSA for \$345,714. Of this amount, \$32,000 represented the book value and the balance, \$313,714 was applicable to "franchises and goodwill."

An acquisition of permanent interest involved TWA as one of the principals and may be looked on as an important aside in the pending proceeding. Late in 1939, TWA proposed to acquire Marquette Airlines, a small feeder, for \$475,333. Also, a commission of \$93,000 was to be paid to Signetair James for securing the deal. The Board, in July, 1940, denied the application chiefly on the premise that the price was excessive.

Taking the hint, TWA subsequently came in with another application—this time offering to pay \$513,333 or a reduction of about one-third. Further, no commission was to be paid. (There was nothing, however, to prevent TWA from hiring Mr. James as a consultant.) The second TWA proposal was approved as a majority Board opinion.

► **There are many ramifications** present in the current merger proposal before the Board. The course of future consolidations and combinations will be shaped by its final action.

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Cracking crude oil into lubricants, high-test aviation gasoline and a hundred other essential products, is accomplished primarily with heat. Here, as in other industries, the advantages of using electronic heat cannot be brushed lightly aside. Greater efficiency, control and production on the one hand, and almost always better products with greater sales appeal on the other.

The first point to remember in selecting electronic equipment is that such equipment can be as better than the electron tubes it employs. The second point to remember is that the equipment which utilizes Eimac tubes is backed by a double guarantee of dependability—one from the equipment maker, and another from Eimac.

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## SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

### Bluegrass Airlines Serves 7 Cities in Kentucky With Cessna UC-78's

Management cites daily passenger and cargo operations as example of service possible in cases of municipalities never before touched by air carriers.

Management of Bluegrass Airlines cites the line's daily intrastate passenger and cargo transport operation as an example of the benefits a small air carrier can offer to communities which never had scheduled air service. Before the company started in early 1944 only one Kentucky city had been served by scheduled lines. Today Bluegrass serves that city, Louisville, with a population of more than 325,000 and six others. The smallest city is 6,500.

First flight was March 18, 1944, with a single-engine Cessna Voyerer. Today there are three twin-engine Cessnas, flying about 1,000 miles a day, with this figure rising soon to 2,500.

Route—initial flights were between Louisville and Bowling Green. Today daily round trips serve Paducah, Madisonville, Owensboro, Louisville, Bowling Green, Lexington and Ashland. The Kentucky Transportation Commission early this year authorized certificates for two routes, Paducah-Louisville and Bowling Green-Ashland. Indigo 4011 was converted and equipped in the company's CAA-approved repair shop and now operating today.

Several other points within the state have been applied for to Kentucky authorities, and four tentative routes have been accepted of CAB in the consolidated South-eastern States Case, which already has been heard and in which an agreement report is pending. Requests—Route requested are: (1) Memphis-Cincinnati-Corbin, (2) St. Louisville-Nashville, (3) Paducah-Ashland; (4) Owensboro-Ashland via Cincinnati. Although interstate applications



Bluegrass Plane: One of the three Cessna UC-78's used by Bluegrass Airlines in serving seven Kentucky cities.

safety and comfort but to speed schedules, although service was maintained for 15 months with Strawn Voyagers and Reliants without an injury to passenger or employee.

► Maintenance facilities are "becoming almost a necessity," officials said, and night flights will be started as soon as facilities are available. The Cessnas are equipped with night flying instruments, but all flights so far have been day contact.

► Management—The management is a partnership of Elmer M. Strawn and his two sons, Marvin and John. On Sept. 1, H. D. Ingalls was employed as superintendent of maintenance and engineering. He was superintendent of maintenance for American Airlines for eight years and vice-president of Northeast Airlines for four years.

► Rates are based on five cents per round mile. Passenger and cargo revenue averaged 75 per cent last June 1944 to June 1945.

# HERE'S WHY YOU SHOULD SEND YOUR OVERHAUL AND RECONVERSION TO US!...

*Western Air Lines, Inc.*  
P. O. BOX 391, BURBANK, CALIFORNIA

September 26, 1945

Major C. G. Moseley  
Grand Central Airport Company  
Grand Central Airport  
Glendale, California

Dear Sir:

I wish to take this opportunity to advise you of a circumstance which, in my opinion, is remarkable.

The last airplane which was reconverted for Western by Grand Central Airport Company was pushed out of the hangar about 10:00 o'clock in the morning and was placed in scheduled service with passengers, mail, and express in the middle of the afternoon of the same day. This particular aircraft had an hour and one-half of flight test after major overhaul and conversion from Army type C-53 to DC-3. This involved substantial structural repairs, skin repairs, revision of floor beams, and many other major items including complete airline radio installation.

Your supervisors and other personnel should be commended very highly for the meticulous quality of their workmanship.

We have expectations of being allocated several C-53's for reconversion and you can rest assured that the work will be performed by your splendid organization.

Very truly yours,

*Charles N. James*  
Charles N. James  
Vice President-Operations



WE CAN do the same "meticulous quality" of workmanship for you that we are proud to have accomplished for Western Air Lines...We have operated "on merit alone" as an approved C. A. A. repair station (No. 75) since 1929...We are an authorized and approved Douglas repair station...We believe we have the finest shops for airplanes and engine overhaul and repair in the United States...Western Air Lines' splendid letter speaks for the quality of our workmanship...We have reconverted a large number of

LOCKHEEDS for the U. S. Navy and private owners...We are also in the fortunate position of having a large group of highly skilled personnel, many with 10 to 28 years' experience in aviation. Many of these men have been with this company more than 10 years...  
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*Since 1929* DOING BUSINESS ON MERIT ALONE... *Our Policy...* PRECAUTION... PRECISION... SAFETY

## Wisconsin Group Hits Charter Curbs

Aviation trade association will participate in CAB and present testimony on board process economic threat.

Wisconsin Aviation Trades Association has voted to contest any limitations by Federal regulations of charter air service and will participate in oral argument which has been set for Nov. 30 by the Civil Aeronautics Board. An examiner's report has recommended regulation of non-scheduled commercial air transport operators.

Dispatching a telegram during its most recent meeting, the association went on record to CAB as follows:

• **Methods**—"Whereas fixed base operators unequivocally opposed to limitation or restriction of charter air bus service for among others the following pertinent reasons:

Large proportion of charter is to feed airlines. Great majority of charters purely interstate. Would kill potential operator market for many lines of aircraft. Would create economic hardships for those with large investments in such aircraft and would diminish income of all operators. Would necessitate layoff of pilots and crash potential employment of returning servicemen. Would interfere with accurate and safe transportation of many individuals. Would interfere with industrial service to dealers, branches and consumers. Would diminish practicability of air service to small communities. Would interfere with aeronautical development and education. Suggest oral testimony if necessary."

R. Merrill Anderson, of Anderson Air Industries, Milwaukee, as spokesman for the association, indicated that the airlines concede that charter services have represented no competition in the past, and still do not, but are fearful of the future. The major airlines have been the main contenders for regulation of fixed base transportation services.

• **Argument**—"The type of service which has been rendered in the past and will continue to be offered by the fixed base operators requires no subsidy and no protection in order to develop," Anderson said, "It is the laissez faire theory of economy upon which the successful growth of all in-

dustries in the U.S. has been protected. It encourages the development of sound operations and eliminates weaknesses and marginal operations which is, undeniably, to the interest of the public.

"It is inconceivable that for a long time the fixed base operators could be competitive with air carriers between scheduled stops. It would be economically impossible with any known type of equipment for a fixed base operator to carry passengers at 45 cents per mile, because no real subsidy is granted and the fixed costs of operation of aircraft are proportionately much higher because of the lower utilization factor."

• **Operations**—"Anderson emphasized that many charter flights start from points not served by the airlines but feed passengers into airline centers. Other charter flights neither start nor terminate at airline points and thus offer no competition to existing scheduled carriers. Charter service from airline points to non-airline points provides an extension of scheduled routes which is to the public and the scheduled carrier's advantage, Anderson said.

"The testimony even of those advocating charter restrictions demonstrates that the perpetration of charter business carried by fixed base operators is a very small proportion of their operations, and negligible to that of air carriers. This must necessarily remain so because no fixed base operator can utilize his aircraft to the point of competition with an air carrier. Charter rates run from 18 to 50 cents a mile. It is economically unsound for a fixed base operator to acquire comparable equipment."

• **Potential**—"The potential fixed base operator market for aircraft suitable to charter operation runs into the tens of thousands, a figure which even the most optimistic of air carrier manufacturers could not anticipate," Anderson asserted.

"If, as the air carriers seem to imply, it is possible that the fixed base operators can in the future become competitive with air carriers on a basis of rates, speed and comfort, and can operate without governmental subsidies, it is obvious that it would be a wise economic policy to foster such a condition as the present air carriers are not then rendering service to the economic good of the country. If such a situation cannot exist, then the air carriers have nothing to worry about, and no regulation is necessary."

## Beechcraft to Unveil New Feeder Line

With production underway as two post-war versions of the well-known Model 18 executive, charter and feeder line, Beech Aircraft Corp. has invited members of the Feeder Airlines Association to a special showing in Wichita Nov. 17 of a sneak-up of another light transport.

The new design has been planned for short-haul feeder services, and it is understood it will accommodate up to 18 passengers.

• **Changes**—"The first new Model D18S made its proving flights in October, displaying results of wartime production experience. The prototype was built in 1936. About 6,000 planes were built for U. S. and Allied services."

The company reports changes in the nacelles, with better streamlining. The landing gear design is new, with a redesigned shock strut and "T" brace. Higher gross weight and payload are made possible. The basic model will have two Pratt & Whitney engines but a Model D18C will be available with two Continentals.

• **Performance**—"According to material released by the company, maximum speed is 227 mph. at 5,000-ft. Cruising is 210 mph. at 10,000 ft. Service ceiling is 20,000-ft. Normal range is 5,000 ft. and 50 per cent power is 1,000 miles with a fuel tank capacity of 200 gallons. With an additional 40-gallon bow tank the range can be extended to 1,500 miles at 5,000-ft., and 50 per cent power."

At recommended take-off engine speed of 2500 rpm, the D18S can clear a 50-ft. obstacle at sea level with full load in a 1,466 ft. run or climb 1200-ft. per minute. On landing it can clear a 40-ft. obstacle and land at sea level with full load in 1,600 ft.

## Southern Airways Action

Southern Airways Inc., of Birmingham has filed an application before Alabama Public Service Commission for unscheduled services involving Birmingham, Mobile and Huntsville, but the action was taken only to protect "quasi-airline" rights at Southern Airways bases, according to Frank W. Hulse, president. "We have no intention whatsoever of operating a scheduled inter-state service," he said.

## HIDDEN HORSEPOWER . . .

Your engine has horsepower that is not available when you use a fixed pitch propeller. It's an engineering fact that any fixed pitch propeller is a compromise between good take-off performance and good cruising.

That means that only with a fully controllable pitch propeller can you utilize full horsepower on take-offs or get the best possible climb or cruising speed under all conditions.

With a Beech Controllable Propeller you can unleash the horsepower you've never been able to use before to get shorter take-offs, quicker climb, faster cruising and more economical operation.

And you'll find the Beech Propeller is lightweight, simple to install, easy to operate. You may have your choice of manual control, electric control, or electric control with constant speed. For long, more enjoyable flying hours install a Beech Controllable Propeller on your airplane.

Write today for our folder giving full details of the Beech Controllable Propeller

## PLUS PERFORMANCE PROOF

Installed on the Grumman Wildcat powered with Ranger engine, the Beech B-202 controllable propeller with 35 inch blades reduced the necessary run for a water take-off almost one half and reduced the ground run required to take off by 22.1%.

On the commercial model Celer the B-200 Beech Controllable Propeller decreased the take-off run by about 25%, and improved the rate of climb by about the same percentage.

In comparative tests Beech Controllable Propellers have shown an increase in rate of climb and decrease of take-off run from 12% to 35% for the various types of engines on which it was tested.

These propellers were made, during the war, for the Army Air Corps and were used on the various "Hapling" fronts and in the Alaskan Sector. Their record of performance is great enough of Beech Propellers' ability to make you feel good long hours of more enjoyable, more economical flying.

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## TRANSPORT

### Backers of World Air Authority Seen Increasing in Influence

Address by Warner before Foreign Trade Council is cited, Canada renews its proposal that international ruling unit be modeled after the Civil Aeronautics Board.

Dr. Edward P. Warner, President of the Imperial Council of the Provisional International Civil Aviation Organization, said in an address in New York last week that if there are to be rules governing competition among world airlines these rules will have to be applied by an international authority.

His statement can be accepted as taken, that advocates of an international air authority with economic regulatory powers are exercising increasing influence in Montreal, home of PICAQ. These advocates are, notably, Canada and Great Britain.

▶ **Vietnam Case**—Warner was addressing the 32nd convention of the National Foreign Trade Council which earlier in the week had heard experts in other fields urge the case of multilateralism last week, perhaps, more vigorously than the former vice-chairman of the Civil Aeronautics Board. "The case for making one world in the air is an almost self-evident one," Warner said.

A further preliminary sign regarding PICAQ came simultaneously in Montreal when Canada renewed its proposal that a world air authority be fashioned in the mold of the United States CAB.

▶ **Reaction**—First to react to PICAQ's request that each member submit its views on commercial rights, Canada, "urges that the successor to PICAQ (a three-year body) should have functions covering the matters of routes and frequencies and of guarding against unfair competitive practices in international civil aviation."

Warner acknowledged that as presently constituted PICAQ has "no truly governmental powers, or almost none," and said solutions for the problems may yet be found through the advisory authority.

▶ **"Fundamentalists"**—But, turning from a discussion of necessity for unified air navigation rules to the "fundamental differences of opinion" on air transport regulation, Warner said this is key: "The question of the number of competitors for a given element of business is closely linked to that of possible proficiency in operation by all the competitors. There has been very widespread agreement that schedule frequency should be increased only as the actual demand for traffic justifies, and never for the purpose of smothering a competitor, but there has been less agreement on how to phrase the prohibition of smothering tactics and how to enforce it."

▶ **It is certainly clear that no rule on what constitutes a wantonly profuse operation can be self-enforced. It is agreed that there is to be any such rule, it will extend the entrusting to some international authority of the duty of applying the rule to the particular case. . . . In air transportation in the 1940's . . . the tide has been running toward the regular modulation of the rigors of competition or a restriction of its extent."**

▶ **Implications**—In a negative way, Warner seemed to express the view that the controversial International Air Transport Agreement, popularly called the "Five Freedoms" agreement, is incapable of winning sufficient acceptance to be effective.

▶ **He made three references to the fact that a multilateral agreement covering the commercial aspects of air transport has yet to be reached.**

▶ **Bilateralism is opposed by almost everyone, in principle, he said, but "until now the art of man has not sufficed to develop a code that would reconcile conflicts of view."**

Then after discussing the "one

major breach" in the rule of bilateralism made in the "Two Freedoms" agreement granting right of transit and technical stop, Warner continued:

"It now remains to be seen whether we can go still further, and lay down rules defining the conditions under which commercial aircraft will be allowed to enter ports for purposes of trade."

Opening his speech, Warner said that since aviation is "a part of the fabric of international relations," only governments can provide the necessary authorities and facilities for its growth.

After discussing the negotiation of competition, he participated on the matter of rules saying there will be continued debate on whether rules will be conceived individually by governments or reviewed by an international body. He pointed out that airline conferences would set rates, but emphasized that nevertheless ultimate control would have to be retained by governments or assigned to an intergovernmental authority.

### AA Leases Phone Lines To Speed Reservations

American Airlines is trying out leased long-distance telephone connections between key cities on its system. Instantaneous contact between all stations is part of its plan for future handling of passenger reservations.

Recent reservation burden falls on American's La Guardia Field office in New York, which the carrier claims is the largest single passenger reservation room in the world.

▶ **Increases**—These a staff of 170 which handles 6,000 to 7,000 calls on the average weekday, and an additional 4,000 teletype messages from other cities in the system. American plans to increase personnel by a third in three office. It estimates that each worker takes care of an average of 16 to 20 calls an hour—five for every one of the 350 to 1,000 passengers a day carried by American out of La Guardia.

▶ **Reservations equipment at the field also would be increased a third. The line is planning installation of electronic equipment to permit more rapid confirmation and elimination of the present "quote board" giving information as to flight conditions and availability of space out of New York and other cities served by American.**

## House Group Urges Stiffer U. S. Policy

Post-war Economic Policy Committee backs whip-cracking over nations refusing to grant free operating privileges.

The House Postwar Economic Policy Committee urged in a report last week that the United States start balking whips over the heads of countries failing to grant U. S. commercial airlines free operating privileges.

The committee, headed by Rep William Colmer (D-Miss.), recommended:

▶ That surplus Army transport planes—urgently needed by European nations—be granted only to countries permitting free operations by American airlines within their territories; and

▶ That U. S. loans, and other forms of much-needed financial assistance, be made only to countries permitting American air carriers free operations.

▶ Britain. The committee specifically hit at Great Britain's failure to permit feeder operations by U. S. commercial lines within its territories and at Russia's "lack of interest, so far, in entering into an exchange of civil aviation rights," which "presents a serious barrier to the real internationalization of air traffic and freedom of movement."

The committee proposed that Army transport planes be turned over to European nations, as part of war-ruined loans. Civilian airlines in Europe, the group commented, are using equipment 15 to 30 years old and "are clearly inadequate, thus even converted Army bombers, to say nothing of the large number of C-47's and other transport planes that could be made available as surplus."

▶ On Great Britain's failure to accede to the United States' position on the right of international carriers to conduct national feeder operations along their routes, the committee observed:

▶ "Britain is asking for a number of important concessions from the United States in connection with lend-lease settlements, loans, and the like. In view of this, it does not seem reasonable for Britain to expect an economic bargain which would make very difficult the operation of American services through Europe and the Middle East on a sound economic basis."

▶ **Recognizably**—While the nation's

selection of British air transportation is purely a British concern, the committee declared, the United States "should not be forced into nationalization or excessive subsidy of its foreign air lines for lack of respect rights which we are willing to afford British air lines as well as to all others."

Russia's failure to join in international free air transit agreements, the committee pointed out, "will exclude another large sector of the world's foreign air lines from general linkage into international systems," and urged the State Department to "insist" upon civil aviation rights for American lines in return to economic concessions made to Russia—such as well as other nations.

## Radcliffe Joins CAB

Latest addition to the Civil Aeronautics Board's Office of Trial

Examiners is Vernon Radcliffe, engineering graduate of New York University and law graduate of Georgetown University. Radcliffe went to CAB as

Advisory Committee for Aeronautics, where he was assistant to Edward H. Chamberlain, assistant secretary. With NACA since August 1938, he handled contract specifications and claims and priority contracts with WPA in Washington, and before that served a year and a half at NACA's laboratory at Langley Field, Va.

## Toronto Field Recommended

The Toronto Airport Committee has recommended that Toronto continue use of the Malton Airport site, 17 miles northwest of the city, as its main field. Incidental costs at Malton will be borne in part by the government at the airport of the Bayview Aircraft of Canada, closer to the city, a heavy financial outlay by the city would be required. The Committee therefore rejected it in favor of the 19-year-old Malton location. The Toronto airport must follow specifications of a Class B transportation airport, with runways at least 6,000 ft. long by 300 ft. wide, and capable of extension to 10,000 ft.

## PCA in "Excellent" Shape For Future, Lochiel Says

Pennsylvania-Central Airlines is "in an excellent position to implement the first phases of post-war equipment plans," says H. G. Lochiel, PCA vice-president and treasurer.

His statement is based on PCA's total assets of more than \$17,000,000. The figure comprises assets totaling \$1,100,000 as of Sept. 30, highest in the company's history, augmented by subsequent income and sale of 35 percent 15-year convertible income debentures totaling \$10,000,000.

▶ **Revenue**—Reporting operating revenue of \$3,438,192 for the quarter ended Sept. 30, compared with \$2,990,312 over the same period last year, Lochiel also stated that PCA will not be subject to excess profits taxes in 1946. Before and estimated results for the rest of the year, in the light of fare reductions and other factors, set the basis for the statement.

PCA's net income for the quarter totaled \$368,009, or 31 cents per share, against the comparable 1944 figure of \$292,600, or 45 cents per share.

▶ **Income**—Operating revenue for the nine months ended Sept. 30 almost doubled the \$4,344,992 through September last year, reaching \$8,293,617. Net income for the period was \$748,618, or \$1.67 per share in 1945, compared with \$358,169, or 16 cents per share in 1944.

## Route Applications Flood Canadian Transport Board

A stream of applications for scheduled and non-scheduled routes in Canada is reaching the Canadian Air Transport Board at Ottawa.

One of the latest came from Prairie Cities Air Lines Ltd., Winnipeg, which asked to carry passengers, cargo and mail in local service over a route paralleling Trans-Canada Air Lines between Winnipeg and Regina, with a new route south to Estevan from the latter point.

▶ **Headings**—The Board recently held hearings on an application by Maritime Central Airways Ltd., only scheduled airline in Canada aside from TCA and Canadian Pacific Airlines, for additional routes to cover more fully the Dominion's three Atlantic coast provinces.



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# Bureaucratic Stifling of Progress Feared in British Airways Picture

Observers see nationalization policy as culmination of 20 years of interference, fear RAF attitudes may inhibit expansion; unfamilar to other forms of transportation cited.

London—Violent opposition to nationalization features of the British Labor government's air policy has come from many quarters, the chief complaint being that it marks the culmination of 20 years of increasing political interference with civil aviation.

Many air enthusiasts fear that bureaucratic control cannot fail to have debilitating effects on an essentially new form of transport. Others fear that under the new set-up the military (RAF) mind will continue to inhibit the natural expansion of civil aviation.

**Others Sigh**—There is also strong feeling that the railway and shipping companies have not had a fair deal. Railway Air Services, which carried 3,000,000 passengers a year prior to Great Britain and on the continent, expired until recently to share in new post-war developments, while British South American Airways, now corporation formed by five shipping companies, already had built up a complete operation for transatlantic operations to South America.

Details of the plan to nationalize all British domestic and international airlines, considered by the Labor government's first cabinet body-blow to British private enterprise, will not be available until publication of a White Paper. Main outlines were given Nov. 1 by House of Commons Lord Winter, Minister of Civil Aviation.

**P Organization**—The policy is based on the principle of national ownership. These public corporations to operate all scheduled services—British Overseas Airways Corp between Britain and the Commonwealth, the U. S., and the Far East, a second corporation between Britain and South America, and a third for European and internal services.

The three are to be financed wholly out of public funds. The Minister of Civil Aviation will make appointments to the three boards, though not involved with day-to-day administration. However, among the corporations will be encouraged

**Airports**—But since these proposals will require complicated and time-consuming legislation, BOAC for the time being will operate all external services and Railway Air Services will continue handling domestic air traffic.

Airports needed for regular scheduled services are to be acquired by the Civil Aviation Ministry. Presumably, Scotland's great wartime airport, is to be designated for international operations. Some of Britain's foreign service would be routed through it.

**Tribunal**—The government's scheme also includes establishment of a tribunal to consider such matters as adequacy of facilities and rates, and makes provision for continued existence of the Brazilian Committee to advise on new types of civil aircraft.

Chief departure from the Coalition White Paper, a combination of chosen instrument and private enterprise, is that there is to be no financial participation by existing transport interests in any of the corporations.

**Reasons**—Main reason for this change appears to lie in pressure of the Labor "backbenches" (private members) who insisted that since the Labor Party program calls for nationalization of all forms of domestic transport, it would be folly not to take the opportunity to start with air transport at a time when recognition was necessary in any case.

Account also must be taken of a widespread conviction, held by Ministers and top civil servants as well as MPs, that "order in the air" internationally can best be realized if Britain enters the post-war world with its international airlines under complete public control.

**Support**—The government's intention to continue fighting for international regulation—essentially an international Civil Aviation Board—is generally supported here. So, also, is Lord Winter's statement that air travel should be made available to the whole population.

Although denying financial par-



## VENEZUELAN VISIT:

Two officials of Lines Aeropostal Venezolana, government-operated airline in Venezuela, inspected Pan American Airways facilities at Miami while they were awaiting delivery of a Lockheed Lodestar. Lt. Rafael Betancourt (right), operations manager, and Astorino Dugarte, maintenance superintendent, listen to explanation of an instrument mechanism by a PAA employee.

ticipating in the government corporations to provide transport interests, Lord Winter has asked their cooperation in coordinating existing transport with the new airlines. But until the White Paper is issued, it will not be clear whether the government expects the close collaboration or merely wishes the private companies to draw up time-tables.

**Opening**—The one opening actually left for free enterprise seems to be charter airlines. But so far as this held the government is not giving the corporations a monopoly. According to some opinion here, the chartering of aircraft, on the analogy of road transport, may exist and even surpass scheduled services in volume and importance. Shipping Airlines Ltd. formed recently by some 27 British owners of deep-sea tramps, and companies engaged in container and short-sea trade, intends to exploit this opening and expects a large demand for chartered aircraft, particularly for cargo.

**Orders**—Now that national policy has been laid down, the British hope that BOAC will get into production operations soon and reduce present high fares. The line has ordered 20 Tutor 7's for Trans-Atlantic service from A. V. Roe & Co., Ltd. manufacturers of the famous Lancaster bomber. Deliveries are expected early next year. It also is reported to have

on order close to 300 twin-engine planes for medium-range services. These probably include the Vickers Viking, the Airspeed (de Havilland) Ambassador and the Handley Page Hermes.

Complete observers of the British aviation scene look for American competition to offer an early and drastic test of the wisdom of Labor's newest venture into public ownership.

## Alabama Issues Report

The Alabama State Aviation Commission has issued a status report on the progress of airport development and improvement of existing fields in 20 Alabama cities.

## PCA-NEA Proposal May Mark Trend

Recent announcement of the proposed merger of Northeast Airlines with Pennsylvania-Central Airlines lends added weight to the opinion held by some observers that a reduction in the number of domestic trunkline carriers is in prospect.

Whether such reduction is effected will depend on favorable Civil Aeronautics Board action. The instant case will be the second before CAB. The first, Mid-Continent's proposed merger with American Airlines, was the subject of a recent rehearing conference (Aviation News, Nov. 12).

**Stock Plan**—The NEA-PCA merger would be accomplished on a stock basis one-half share of PCA for each outstanding share of Northeast's. NEA's routes, equipment, and identity would be fused into PCA's system.

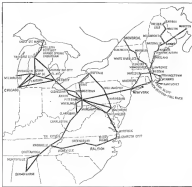
More than 1,000 route-miles already operated by NEA in the New England area would be added to PCA's route network of some 4,000 miles in 13 eastern states. Extension into Montreal and Toronto, Canada, also would result through acquisition of NEA's foreign segments.

**Equipment**—Combined equipment would be 34 DC-3 type planes and 16 4-engine craft, 12 with 55-passenger and four with 60-passenger capacity.

Anticipating this equipment would be planes now on order by both lines. PCA announced last week that it had contracted with the Glenn L. Martin Co. for 35 of the latter's Model 202s, costing \$1,000,000.



PCA Orders Martin 202's. Present when PCA recently became the first airline to order the new Martin 202 were (seated, left to right) C. Bedford Moore, president of PCA, and Harry Boland, first vice-president of the Glenn L. Martin Co., and (standing, left to right) Dayton McGraw, Martin's director of commercial sales, and J. H. Carraway, PCA vice-president, operations.



PCA-NEA Routes: Map shows 5,000-mile route system that would result from the proposed PCA-Northeast Airlines merger. Solid lines are PCA's present system, and dash line follows the more than 1,000 miles of routes served by NEA in the New England states.

## Detroit 'Port Picture' Still Deadlocked

Detroit's "airport struggle" has reverted to its June status, with consideration proceedings on the proposed Northwest Airport site under way but not in court, a continuing deadlock on acceptance by the city of the Board of Commerce's land offer, and the Wayne County Board of Supervisors holding out for expansion of Wayne County Airport as "interim" field for winter operations.

Realizing that sufficient votes could not be raised to override Mayor Edward J. Jeffries' veto of approval of the Northwest site, City Council has tabled further action on the Mayor's veto message of its resolution to rescind condemnation proceedings on that site.

**Funds Available**—The Wayne County Board of Supervisors points out that the county has \$500,000 with which to begin expansion of Wayne County Airport and that "the money could be spent wisely if we knew we were going to create a permanent major airport."

Meanwhile, M. W. Cochran, chief engineer of Gaffels & Vallet, Inc., associated architects and engineers, asserted the Northwest site, if adopted, would not cost the taxpayers anything but instead could be a revenue-producing project.

"The airlines and users of this airport will pay for the costs of construction, maintenance and operation," he said. "When the original investment by the City in land will be paid for out of revenue."

**Other Projects**—Cochran's firm, whose airport division claims it has completed more airport planning projects than any other firm in the country, recently received its fifth such assignment in a contract from the city of Flint, Mich., for development of an over-all airport plan for Flint and the surrounding area. Similar jobs are being done for Toledo, Ohio and Ann Arbor and Pontiac, Mich.

Elsewhere in the same state the Greater Muskegon Trades & Labor Council (AFL) has adopted a resolution asking that labor as well as management be selected for funds to expand the Muskegon County Airport into a \$1,000,000 Class 4 project.

## American Steps Up Flights to London

American Airlines this week steps up to five a week the frequency of its flights from the U. S. to London, adding three more U. S. co-terminals to the trans-Atlantic service already accredited New York and Boston.

The British were notified of the increase in number of weekly flights, previously there, but made no objection. Several factors may have contributed to the British tant consent.

**Cooperation**—The temporary nature of the American arrangement, although it is fully expected to become permanent, is one of those factors. Another is that the British could refuse the increase only at the risk of embarrassing itself and public criticism. For a third, there is the certainty that Britain will wish to increase her own schedule to this country.

American will start weekly flights from New York to London and from Washington and Philadelphia next Friday, Nov. 23, the latter pair served on the same flight. Hitherto, American's international division—America Overseas Airlines—has made its London flights from New York and Boston, although its certificate lists six co-terminals in the North Atlantic certificate, is to be served in the near future, American says.

**Route**—The Chicago flight, like those from Washington and Philadelphia, will be made via New York and Shannon Airport, with destination Birmingham, 118 miles from London, where a special train carries air travelers to the city. Both American and Pan American Airways have been using the route, the last week the company's planes were brought that they soon would get to use Birmingham Field, 26 miles from London. That information here is that the large amount of military business of Birmingham has delayed its commercial use.

American's flight from Chicago leaves Monday and arrives at Rome Tuesday. Return flight leaves Tuesday and arrives at Chicago Wednesday. Washington flight leaves Wednesday Friday morning and Philadelphia Friday afternoon, arriving at Rome Saturday, with return flight leaving later Saturday, arriving at Philadelphia and Washington Sunday.

## D. C. Court May Hear United's Appeal Soon

Prospects are that United Air Lines appeal in the Denver-Las Angeles route case may be heard by the U. S. Court of Appeals in the District of Columbia, around the first of the year. Disposition of the court, attorneys say, has been to hear such cases as soon as possible after filing of briefs is completed.

United's was filed recently, in support of its request that the court set aside a Civil Aeronautics Board decision awarding the route to Western Air Lines and remand the case for CAB review. The Board has until Dec. 15 to file an answering brief.

**Contention**—United, following the line of its argument in asking the Board to reconsider the case (AVIATION NEWS, Dec. 18, 1948), contends that the Board's decision was arbitrary and contained conclusions not substantiated by its opinion.

One of the major charges is that the Board acted without evidence to support the assumption that United and Western would enter into agreement for interchange of planes at Denver, that the Board would approve such an agreement, and that the pact would continue indefinitely. CAB then granted connecting service, United contends, while conceding that one-carrier service is more desirable.

**Criticism**—Not only is there no justification in the record for a

conclusion that such an agreement would be reached, United says, but "there is every reason to believe that negotiations between the two competing carriers would result in disagreement."

Operations under the pre-war arrangement whereby United Western and United exchanged sleeper plane equipment at Salt Lake City ceased when the Army took such equipment in 1945, and have not been resumed, although the agreement still is on the books. United maintains, moreover, that whether the Board thinks the Salt Lake City exchange was successful or not, United and Western compete between San Francisco and Los Angeles and "parallel" competitors use the most intense competitors whereas interchange carriers should be the most intense competitors.

## C-54B Price Is Cut; Airline Move Awaited

SPA reduction to \$300,000 announced; counterproposal of \$75,000 anticipated from operators.

Bartering between Surplus Property Administration and the airlines on prices for C-54s was in full swing last week, with W. Stuart Symington, Surplus Property Administration, announcing that the price on the C-54B was down from \$112,500 to \$90,000. The airlines, who wanted \$300,000 for this ship in view of high conversion costs (AVIATION NEWS, Nov. 12), probably will counter that \$90,000 still is too high and suggest that \$75,000 would be a fairer figure.

**New Plan**—The new purchasing arrangement for various C-54 types represents a reduction in earlier prices ranging from 35 to 60 percent. The change is being made in leasing arrangements, which still stand at \$30,000 a year.

The reduction is a clear indication, however, that the government is willing to sell, rather than lease. There have been no sales to date, though several C-54s have been allocated on a lease basis.

**Original price** on the C-54B was \$148,000, which allowed \$150,000 for conversion. To assure future availability of the \$145,000 C-52. That on the C-54B basic was \$100,000 and on the C-54A \$125,000. **The new schedule:** Basic and A, \$75,000; B and D, \$90,000; E, \$125,000.



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## Clinic Time

**T**his National Aviation Clinic meeting this week in Oklahoma City will attract the largest gathering of the aviation elite this country has seen since last year's edition. There is no other event which has won the wholehearted acceptance of every field of aviation—manufacturing, distribution, sales, transportation, education, law, government and sport. Nor does

any other industry that we know have such a national clinic representative of all its phases, to examine its problems of the present and the future. As President Truman wrote Governor Kerr of Oklahoma, the National Aeronautics Association and the people of Oklahoma are to be congratulated upon the vision which brought into being such a forward looking project.

## All-Weather Flying—When?

**S**OMETIME this winter airlines will start using equipment being installed at 12 major airports to permit an instrument landing every three minutes instead of every 15 to 15 minutes. This is progress, of a sort. But 12 airports in these United States is not a figure that the world's greatest airline system will boast about, especially at this late date. In two days last week, when fog shrouded the entire East Coast, the New York Times estimated that 30,000 air passengers were kept on the ground.

Although Germany's pre-war and wartime air transport industry failed in many respects to equal our own, a group of U. S. airline observers who recently returned from a study were impressed with the progressive application of radio and electronic devices in Germany.

C. A. Petry, superintendent of communications for United Air Lines, a member of the Aeronautics Subcommittee of the Technical Industrial Intelligence Committee, reports that the Germans had made immediate application of any new development as soon as it proved to offer definite operating advantage and provided it was safe and dependable.

An excellent example was the instrument landing system which has been a crying need of the U. S. domestic commercial air transport industry. Mr. Petry says, "For almost 10 years the Germans used instrument landing devices on aircraft with a high degree of success. Meanwhile, we had a better system 'on the shelf' and had not made practical commercial application of it simply because we could not agree between industry, government and military as to what form it should take. Our final result is undoubtedly better than theirs, but they had the advantage of using it years ahead of us."

The 12 installations now barely underway represent a temporary compromise between the airlines and the CAA. Definite decisions on permanent equipment still have not been reached and actual all-weather air transport flying may be years distant, despite the public's belief that the miraculous radar can be installed on every airline transport within a few months. The industry might well take cognizance of this fact in its public relations and advertising program before surface competitors do.

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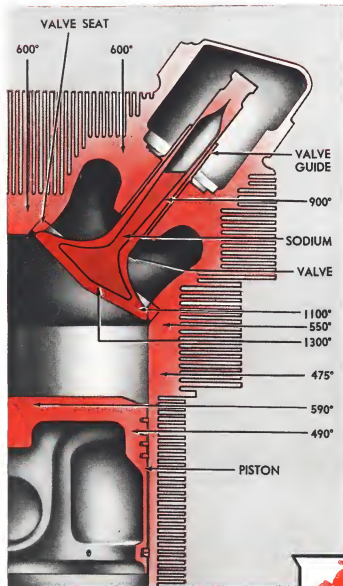
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For here scorching heat continually attacks the thin oil film...tends to cause rupture and "frying" which results in excessive wear.

To offset this, *new* Mobiloil Aero has built-in chemical stability that gives maximum resistance to gum, lacquer and sludge formation. Its strong, protective film means maximum lubricity.

Operational flights covering thousands of air-hours have proved *new* Mobiloil Aero's exceptional wear-resisting qualities under all flight conditions.

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## Mobiloil Aero



**SAVES POWER  
SAVES WEAR**